

THE CANADIAN HOSPITAL

OFFICIAL JOURNAL
CANADIAN HOSPITAL COUNCIL

APRIL 1947

MAXIMUM OCCUPANCY TO CONTINUE!

Men and women qualified to know, predict present maximum hospital occupancy is here to stay . . .

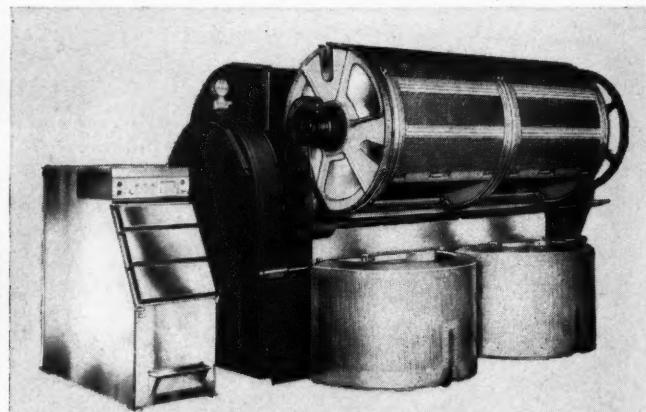
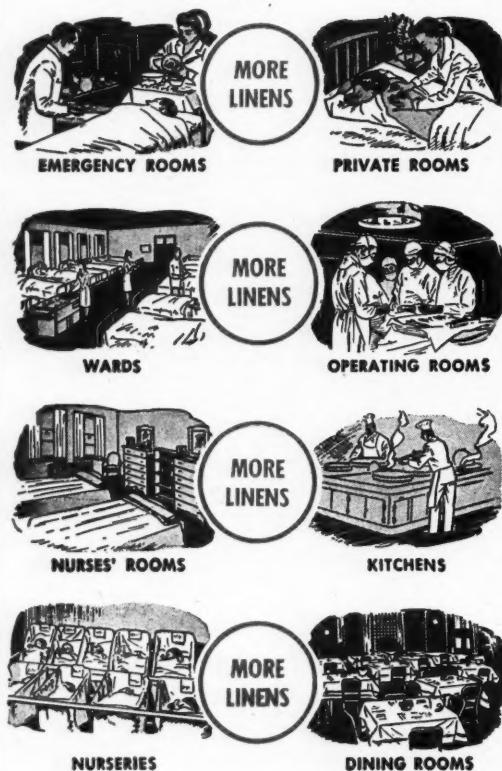


Remember... Every department of the hospital depends on the laundry.

WILL YOUR LAUNDRY HANDLE THE LOAD?

► The laundry is already overburdened. With every hospital facility taxed to capacity, unprecedented demands for clean linens are being made on the laundry. Result—the laundry has had to produce far beyond its original planned capacity in order to keep all departments functioning properly. How long can the laundry carry this extra load?

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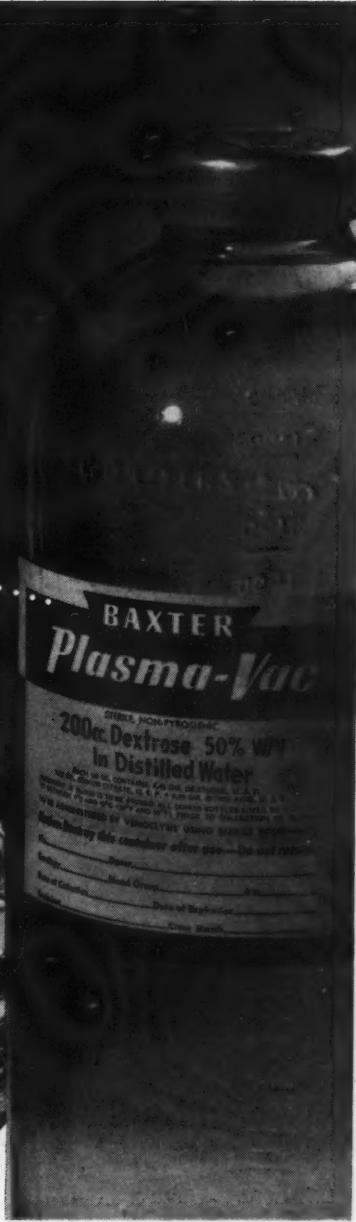


NOTRUX Extractor produces more loads of extracted work per hour with less manpower through fast machine-loading and unloading.

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now

the hospital, too

can share in miniature-film
economies through these new
low-cost auxiliary units

some typical applications

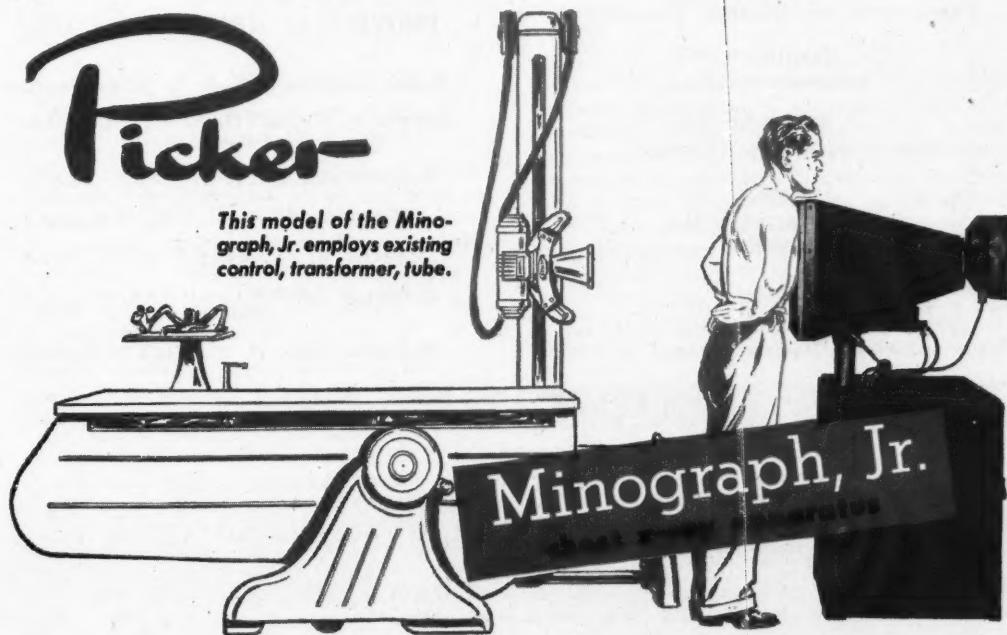
- admission screening
- out-patient screening
- periodic staff examination
- small-group surveys

The new *Minograph, Jr.* fluororadiographic units bring to small-group chest work the efficiency and economies which have made the Picker automatic 70 mm. *Minograph, Sr.* supreme in the large-group survey field. These low-cost units employ specially designed Picker single-frame cameras, 35 mm. or 70 mm., or 4" x 5". There are *Minograph, Jr.* combinations with complete generating and control systems: still other models are operable, as auxiliaries, with existing equipment.

A demonstrably practical investment for the small hospital . . . film economy alone, in normal usage, can absorb initial cost over a three-year period.

Picker

*This model of the *Minograph, Jr.* employs existing control, transformer, tube.*



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The Federation of Hospital Associations in Canada
in co-operation with the Federal and Provincial
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CCAB



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When Continuous Oxygen Is Prescribed For Children . . .

Use of the open-top oxygen tent enables the nurse to administer food, medication, and nursing care easily and with no interruption of therapy.

The oxygen is introduced through the top of the ice compartment. There it is cooled and drops to the bottom of the tent, setting up a gentle thermal circulation. This cooling effect is a real advantage when children are febrile.

While primarily designed for children, it has also been effectively used for adults.

Oxygen concentrations comparable to those obtainable in conventional type tents are possible with proper care. Frequent analyses of the at-

mosphere at the patient's nose level are indicated to assure maintenance of prescribed oxygen concentrations. Room drafts must be avoided, for they increase the rate of oxygen diffusion and necessitate a higher liter flow or make it impossible to keep the concentration at the desired level. These precautions are necessary to accomplish the objectives of effective tent therapy most economically.

The Oxygen Therapy Handbook describes procedure for the open-top tent. Send for a free copy.

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"Dominion" and "DOC" are trade-marks.

The Open Invitation

Surgical Supplies (Canada) Limited extends a cordial invitation to members of the Canadian medical profession, to nursing staffs, to members of hospital boards, and to all other persons interested in the manufacturing and use of surgical instruments and major hospital equipment, to visit our new \$159,000.00 plant at the official opening on Monday, April 21st, between 3.00 and 7.00 p.m.

The plant is located at 80-88 Sherbourne Street, Toronto, and will be open for inspection each day throughout the week of April 21st, following the official opening.

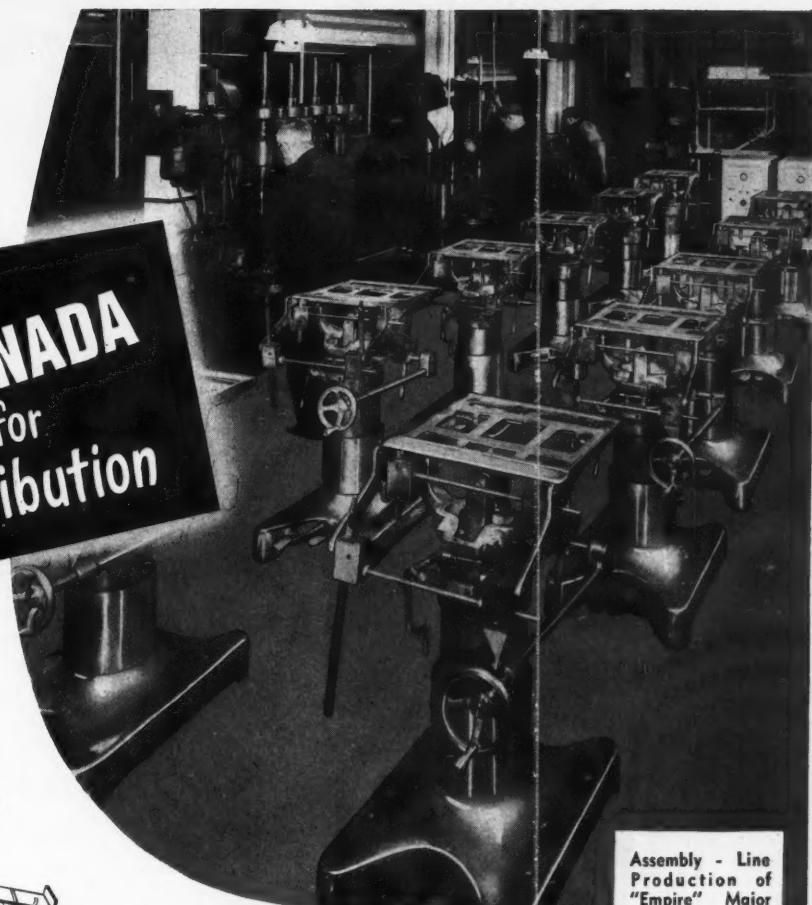
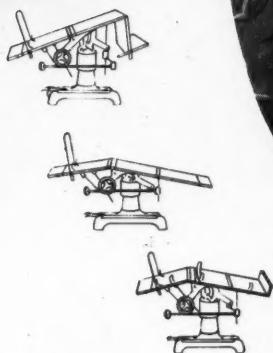
Of interest will be such features as Surgical Supplies' Display Room—embracing one whole section of the new plant—showing a complete Major Operating Room, 20' x 16', a Sterilizer Room, Case Room, Private Patient's Room, and Doctor's Private Suites . . . Here is your opportunity to see more than 100 master mechanics engaged in the precision work of producing intricate surgical instruments and major hospital equipment for use throughout the world.

Surgical Supplies (Canada) Limited is a Canadian industry—the only one of its kind in Canada—established now in its modern, up-to-date factory. And this is your invitation to see it. A visit, we believe, will prove interesting and informative to those connected in any way with the medical profession.



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yes...
MADE IN CANADA
...for
world distribution



Assembly - Line Production of "Empire" Major Operating Tables shown in Surgical Supplies' Heavy Equipment Division.

"Empire" Hospital Equipment . . .

Made in Canada by Canadian workmen . . . in use the world over . . . Brazil, China, Mexico, Poland, Czechoslovakia, Holland, France, Greece, Yugoslavia, Hungary, Russia . . . Whether it be heavy equipment, or any one of hundreds of hospital necessities right down the line to the smallest Instrument Sterilizer, hospitals throughout the world use "Empire" equipment with confidence.

More than 100 master mechanics specially trained for the precision work required, and the production chiefs, who served their apprenticeship with the foremost Surgical Instrument and Hospital Equipment manufacturer in Switzerland, produce hospital equipment of outstanding technical achievement which offers long service, maximum convenience and working ease. Inso-

far as "Empire" Operating Tables are concerned, Surgical Supplies (Canada) Limited produced the first major operating table for brain surgery ever made in Canada—in 1936—and today produces hundreds of operating tables and pedestal-base obstetrical tables a year for world distribution.

CANADA'S SOLE MANUFACTURER OF:—

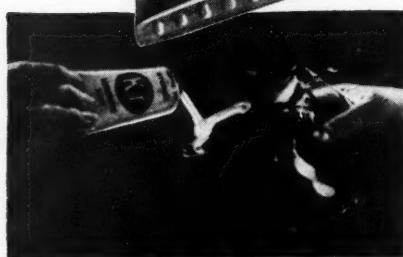
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- Distinctive Hospital Equipment.

Write for Information on ANY Requirement in Hospital Equipment and Surgical Supplies.



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for
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- This bland, greaseless jelly spreads readily over rubber, metal, or synthetic surfaces. It forms a lubricating film that adheres well, but may be washed away easily. Its exceptional lubricating quality facilitates procedure and minimizes discomfort to the patient.

K-Y* Lubricating Jelly is sterile, water-miscible, transparent — harmless to gloves, instruments and human tissue.

SPREADS READILY—ADHERES

Active ingredients: chondrus, tragacanth, glycerine, water, boric acid.

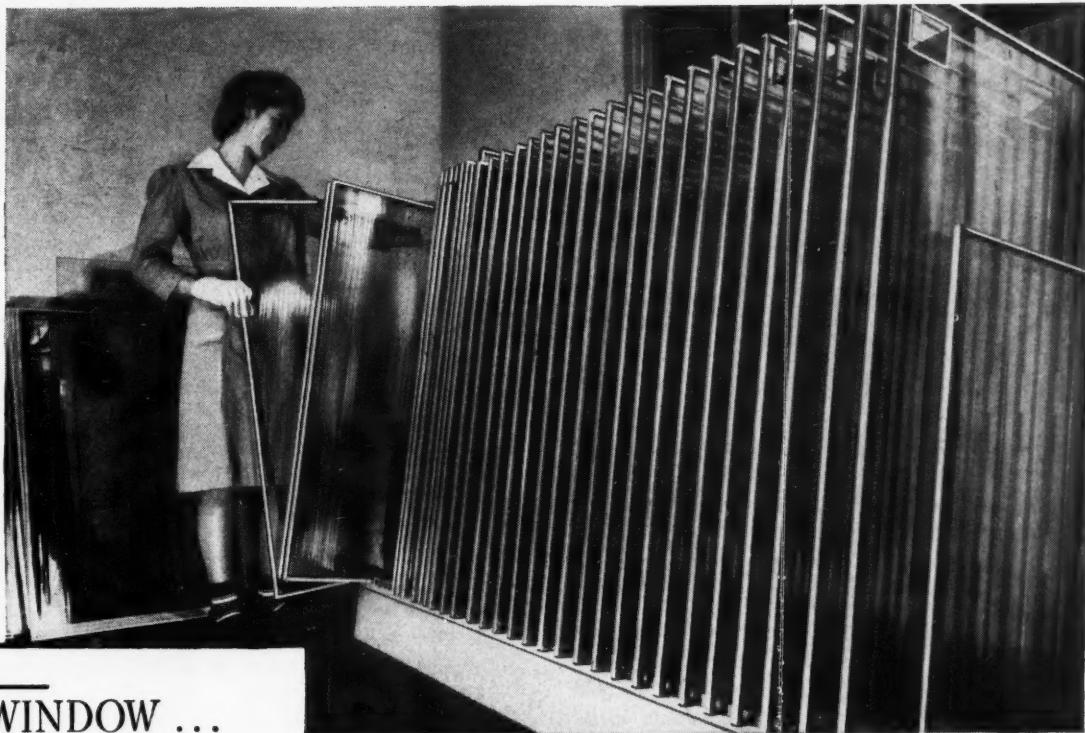
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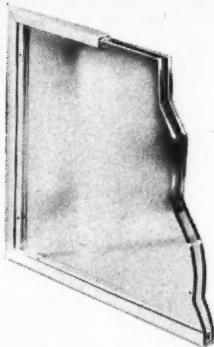
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TWINDOW STANDARD SIZES



TWINDOW ...



- Reduces heating costs
- Permits use of larger windows
- Virtually prevents condensation
- Minimizes downdrafts near windows
- Installs as simply as a single pane of glass
- Requires cleaning on only two surfaces

SOME SIZES CAN BE DELIVERED IMMEDIATELY FROM STOCK! In order to facilitate production and to meet increasing demands for Twindow, as well as to simplify design and installation, Hobbs have established a range of standard Twindow sizes.

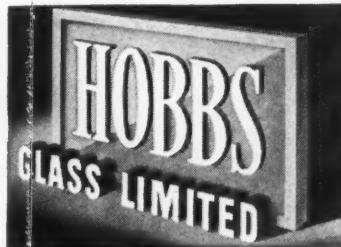
The wide acceptance of Twindow is a tribute to its superior performance and its permanency as an insulating unit. Twindow is the *newest* in double glazing! Hazards such as chipping and faulty seal, that may affect other types of double glazing, are eliminated by the exclusive Twindow seal and stainless steel frame. Twindow's hermetic seal *stays sealed!* Only Twindow gives you this protection!

Remember, you may order Twindow in standard sizes NOW. Delivery is prompt. Twindow is made in Canada.

ORDER THESE STANDARD SIZES

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Superior in Peptic Ulcer Treatment

KLIM Powdered Whole Milk, a more concentrated source of anti-peptic and antacid protein, is more effective in its neutralizing action.

By using **KLIM**, the 29 feedings of the standard procedure are reduced to 14.

Individual feedings of $1\frac{1}{2}$ tablespoonfuls of **KLIM** in 3 ounces of water have a protein content of 3.3 grams in contrast to 2.6 grams in a standard milk and cream mixture. The milk curds are smaller, have a greater neutralizing effect, providing a larger quantity of the beneficial protein more effectively.

In addition, the associated minerals in **KLIM** exert a marked buffering action against gastric acids. With **KLIM** the mineral intake may be increased without adding appreciably to the dietary volume.

Consider these superior advantages in the treatment of peptic ulcers.

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KLIM

First in preference the world over



Across the Desk

From Syringe Holders to Major Hospital Equipment

ONE lathe, one miller, one vise and 100 square feet of space constituted a factory which was destined to become Canada's sole manufacturer of surgical instruments and many items of hospital equipment.

The story begins 14 years ago, in 1933, and today sees



Jules Soltermann

the firm, **Surgical Supplies (Canada) Limited**, established in its new \$159,000.00 plant at 80-88 Sherbourne St. in Toronto, in which \$50,000.00 of the newest, most up-to-date equipment has just been installed, in addition to \$100,000. worth of special surgical instrument dies and tools required for the production of hundreds of different types of surgical instruments.

The firm was organized by Jules Soltermann, a young Swiss who graduated in medicine from the University of Berne, studying under such celebrated men as Kocher, De Quervain, Matti and Sauerbruch. He subsequently served a five year apprenticeship in the plant of the well-known manufacturer of surgical instruments, major operating room equipment and sterilizing plants, Schaefer S. A., Berne.

Associated with Jules Soltermann was Paul Aldwyn, a graduate technical engineer fresh from many years at Schaefer, S.A., Berne. Today, Paul Aldwyn is considered in the hospital field to be a versatile and outstanding technician, when it comes to solving construction details. He has devoted his whole life to this work.

The difficulties were great but the company forged ahead. Today the plant occupies 40,000 square feet of space, and manufactures major operating tables, stainless steel surgical instruments, sterilizers, modern hospital furniture and a host of hospital specialties.

The plant itself is a point of real interest. Here will be seen all the various stages in the making of major operating equipment, the 57 stages of bringing a rough instrument forging down to the finished instrument, sterilizers and hospital furniture, right from the sheet steel stage down to painting, baking and finishing.

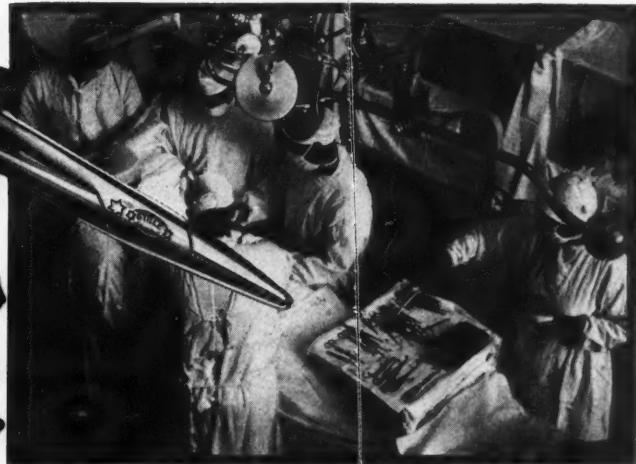
The products of **Surgical Supplies (Canada) Limited** are in use throughout the world today. Very shortly the line of Canadian made autoclaves will be extended to include all sizes and types. Operating lights are in the development stage.



Paul Aldwyn



BACK AGAIN
WORLD FAMOUS
SURGICAL INSTRUMENTS



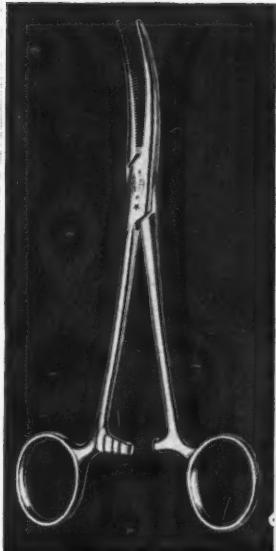
STILLE STAINLESS STEEL SCISSORS. Highly rust and corrosion resistant. Smoothly ground. Retain their sharp cutting edges from three to five times longer than ordinary scissors.

REDUCE HOSPITAL EXPENSE

with genuine "STILLE" stainless steel surgical instruments.

These high-grade stainless steel instruments require *no replating or repairing* when given fair treatment under normal operative conditions.

The comfortable "feel", light weight and perfect balance of these beautifully made, scientifically tempered instruments make for easier, safer, steadier operation, while their recognized durability ensures sound hospital economy.



STILLE STAINLESS STEEL HAEMOSTATS. Each section tempered to various degrees of hardness. Catches are glass-hard to ensure wear resistance.

THE J. F. HARTZ CO., LIMITED

1434 McGill College Ave. 301 Barrington St. 32-34 Grenville St.

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HALIFAX

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They look to you, Doctor..

“ The destruction of bacteria (disinfection) or interference with their activities (antisepsis) by chemical means is attempted daily in proceedings ranging between proved usefulness and utter futility.”

Garrod, L.P. and Keynes, Geoffrey L. (1937) Brit. Med. J. 2, 1233.

IF SO FORTHRIGHT a reminder as this should have been addressed to the medical profession itself, how much more does the unskilled user of antiseptics — the ordinary householder — stand in need of guidance !

ALL ANTIBACTERIAL agents — whether for treatment or prevention — are in some degree selective. The choice of the antibiotic or chemotherapeutic substance for treating an established infection is a matter for your skill. But the choice of the antiseptic for preventive use in the home is a matter which calls clearly for your advice. FOR GENERAL USE in unskilled hands, obviously the less selective agent is to be preferred.

NOW, it is one of the many advantages of ‘Dettol’ that it is rapidly lethal to a diversity of common pathogenic organisms ; to haemolytic streptococci, to *Strep. pyogenes*,

Staph. aureus, *B. coli*, *B. typhosum* and to such wound contaminants as *B. proteus* and *Ps. pyocyanea*. And for all this low selectivity, ‘Dettol’ is non-toxic, highly bactericidal in the presence of blood, pus and other wound debris, pleasant in smell and non-staining to linen or the skin.

ITS HIGH germicidal efficiency, safety and pleasantness have won preference for ‘Dettol’ in all the leading maternity hospitals of Canada. The value of such a non-poisonous antiseptic for prompt unsupervised use in households (where there may be young children) needs no emphasis.

‘DETTOLE OBSTETRIC CREAM is a preparation of 30 per cent. ‘Dettol’ in a suitable vehicle, the right concentration for immediate use in obstetrics. Applied to the patient’s skin and to the gloves of the operator, it forms for more than two hours a dependable barrier against re-infection by haemolytic streptococci.

RECKITT & COLMAN (CANADA) LIMITED, PHARMACEUTICAL DIVISION, MONTREAL.
M14

STREPTOMYCYIN

In Adequate Supply

STREPTOMYCIN IS EFFECTIVE in the treatment of: Urinary Tract Infections, Bacteremia, and Meningitis due to susceptible strains of the following organisms:

Klebsiella pneumoniae (Friedländer's bacillus)

TULAREMIA

All *H. influenzae* infections

Streptomycin is a helpful agent also in the treatment of the following diseases, but its position has not been clearly defined:

Tuberculosis.

Peritonitis due to susceptible organisms.

Pneumonia due to *Klebsiella pneumoniae*. (Friedländer's bacillus)

Liver abscesses due to streptomycin-sensitive bacilli.

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Endocarditis caused by penicillin-resistant, streptomycin-sensitive organisms.

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Allenburys PROCTOCaine

In Pruritus Ani, Anal Fissure, Neuritis, Lumbago, and for use in Haemorrhoidectomy and minor Rectal operations.



PROTOCAINE (Procaine 1.5; Butyl-p-aminobenzoate, 6; Benzyl alcohol 5; Vegetable oil to 100) is a non-toxic local anaesthetic with immediate effect, producing anaesthesia for periods from 7 to 28 days. It prevents all reflex movement during the critical period after operations such as for haemorrhoids and for anal fissure. Its effect is almost certain. Its injection is painless, if made slowly, and does not produce severe after pain.

The anaesthetic action of "delayed anaesthetics" though prolonged, is delayed in its onset. This disadvantage is overcome in "Proctocaine" by the use of an anaesthetic which, while soluble in oil, is also soluble in water. This anaesthetic is compatible with the other ingredients of "Proctocaine", diffuses quickly into the tissues on injection, and acts promptly.

"PROCTOCaine" is available in 2 c.c., 5 c.c. and 10 c.c. ampoules.

COMPLETE LITERATURE SUPPLIED
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LINDSAY, ONTARIO

LONDON, ENGLAND

Across the Desk

Doctors See Operation by Television at Johns Hopkins

The first television broadcast of an actual operation to test the practicability of television as a means of surgical teaching was presented recently by the Johns Hopkins University and Hospital in co-operation with the RCA Victor Division of the Radio Corporation of America, with which RCA Victor in Canada is affiliated.

The important purpose of the experiment was to attempt to permit the members of the Johns Hopkins Medical and Surgical Association to witness the operations during the two-day reunion of the Association. The experiment was arranged by Dr. I. Ridgeway Trimble, and Dr. Frederick M. Reese, members of the Hospital's staff, with the approval of Dr. Edwin L. Crosby, Director of the Hospital.

Representation was restricted to receivers in rooms on the operating floor of the hospital, as the telecast was designed for doctors and surgeons only.

The first operation to be televised, as a rehearsal for the experiment, was the so-called "blue" baby operation. Other operations, including two more "blue" baby operations were televised during the course of the experiment.

RCA Victor said the company "welcomed this opportunity to make its television cameras and receivers available to Johns Hopkins for this teaching experiment. The closed circuit television broadcast of these operations marked another step in the progress of electronics science. The Radio Corporation of America believes that television, although designed primarily as a new home entertainment medium, can also find important service in the education field. This first telecast of an operation admittedly of an experimental nature, demonstrates its possibilities for use in the field of surgical education."

* * * *

Assistant Sales Manager of McGlashan, Clarke

The McGlashan, Clarke Co. Limited, Niagara Falls, announces the appointment of Mr. John Beaven as Assistant Sales Manager for Canada. Mr. Beaven has been connected with the McGlashan, Clarke Co. for the last ten years and will now assist A. E. Davis, Vice-President, in charge of sales, at the Company's Sales Office in Toronto.



Hotel and Institutional Suppliers Meet

At the Annual Meeting of the Hotel & Restaurant Suppliers Association, Inc., held at the Mount Royal Hotel, Montreal, on February 20th, the following officers were elected for the ensuing year:

President: Jean Rinfret, Bell, Rinfret & Co. Limited.
(Concluded on page 20)

WESTEEL

**"PLANNED
UNITS"...**

TO SUIT YOUR SPACE



YES, Westeel Toilet Partitions *ARE* standardized for cost reduction. **BUT**, Pilasters, Doors and Panels are available in a wide range of widths that allows great flexibility—enables construction of "Planned Units" to fit space limitations with no sacrifice of utility.

Let a Westeel Partition man help you with your layout—help you create a smart, modern, sanitary Toilet Room at minimum cost.

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WESTEEL
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Deliveries dependent on steel supplies.

WESTEEL PRODUCTS LIMITED

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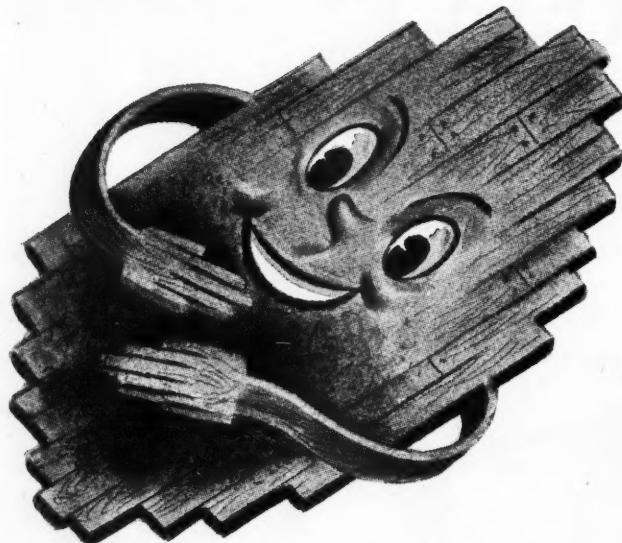
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MONTREAL

METALLIC ROOFING CO. LTD.
TORONTO

WESTERN STEEL PRODUCTS
WINNIPEG
AND WESTERN BRANCHES

Give your floor the **WESTONE TREATMENT**



HUGGING ACTION **keeps dust grounded!**

Believe it or not, foot traffic can't kick up annoying dust with Westone — the different kind of liquid chemical developed for floors by West. Westone's "hugging action" holds dust close against the floor surface; prevents it from "taking off" into the atmosphere until ready to be swept away.

Moreover, for all types of old and new wood floors, Westone doesn't merely give *ordinary* protection against wear. It actually *strengthens* their surface, and

effectively *removes* many harmful foreign elements. Waxed floors, concrete floors, composition floors and other types also benefit from the "Westone Treatment."

Non-staining, Westone actually improves the appearance of your floor with every application. Not a floor oil, it spreads so easily that one person can do the work of three.

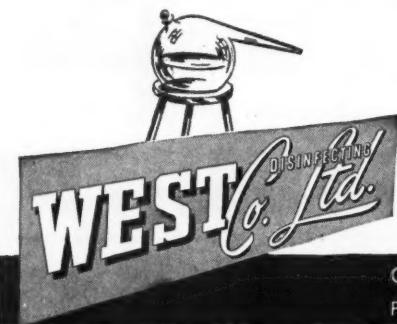
One of West's nation-wide staff of over 475 trained representatives will be glad to help you with your floor maintenance problems.

Products That Promote Sanitation

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**CLEANSING DISINFECTANTS • INSECTICIDES • KOTEX VENDING MACHINES
PAPER TOWELS • AUTOMATIC DEODORIZING APPLIANCES • LIQUID SOAPS**



Stafford's Chicken Soup

BASE



has that zesty home-made Chicken flavour



YOU bet it has that zesty, chicken goodness, because it contains *real* chicken fat with a mild seasoning added. Just add boiling water and you have a tempting appetizing chicken soup that has a rich golden colour, and *tastes* like real home-made chicken soup.

Chefs add rice, noodles or other extras.

A pound jar of Stafford's Chicken Soup base makes 3 gallons of soup.

Another Stafford laboratory controlled product *accepted* and *approved* by chefs in leading restaurants and hotels.

STAFFORD'S FAVOURITE SOUP BASES

CHICKEN SOUP
CREME OF TOMATO
BEEF BROTH
JELLIED CONSOMME
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Mr. C. E. Smith of Jordan Wines (Que.) Limited, past-president, was elected honorary president and director.

* * * *

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Appointment of Charles Morrison as managing director of the Canadian Division of the Glidden Company has been announced

by A. D. Duncan, vice-president and general manager of the Glidden Company Limited, Toronto.

Mr. Duncan, recently elected vice-president and director of the parent Glidden Company, Cleveland, O., cited the growth of the company's Canadian Division under Mr. Morrison, who has served as acting managing director since May, 1945.

Mr. Morrison joined the Canadian Division 27 years ago and since that time has served the company in various important capacities.

* * * *

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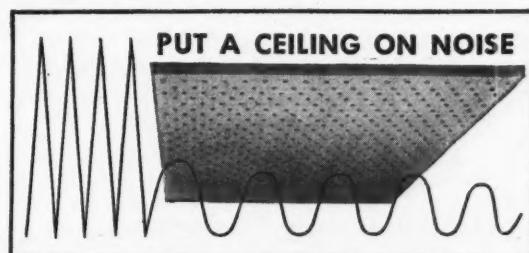
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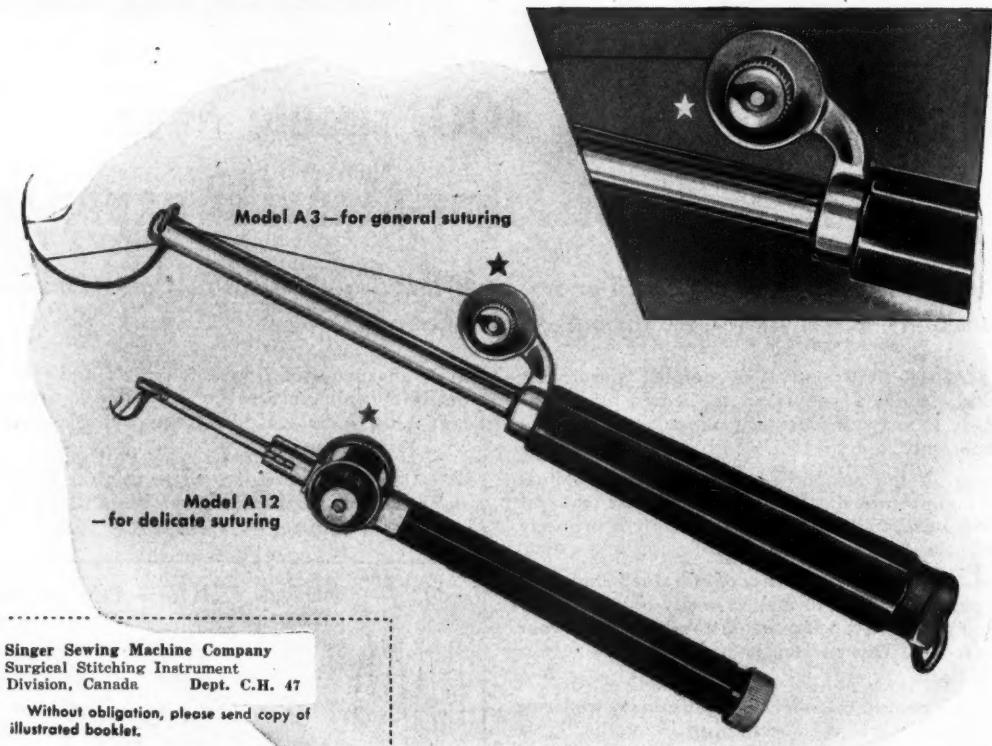
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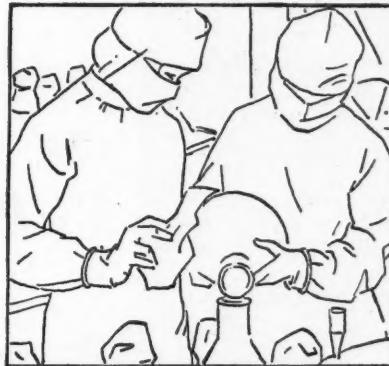
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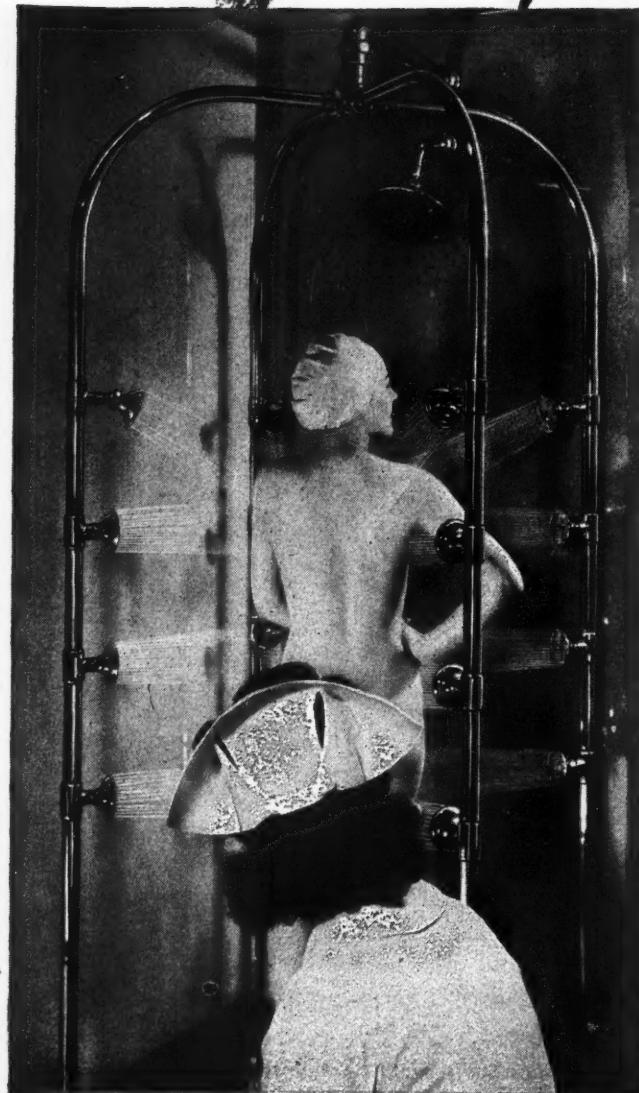


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Harvey Agnew, M.D., Editor

Toronto, April, 1947

Vol. 24

THE CANADIAN HOSPITAL

No. 4

Aid to Ontario Hospitals *On Basis of Public Ward Beds*

THE budget which is before the Ontario Legislature as we go to press is one which will give courage to the hearts of hospital administrators and trustees all over that province. Provincial Treasurer Leslie Frost indicated in his budget speech that, at a cost of more than two million dollars, assistance will be extended to all hospitals in Ontario on the "basis of public ward beds, regardless of whether the patients are indigent or not".

We quote: "One of the essentials is to provide the hospital with the necessary income to carry on its work. Prior to a year ago all provincial assistance was given by way of payments of a portion of indigent costs. The Government felt this was not the proper basis and that assistance should be extended on public ward beds. A formula was devised for the teaching hospitals. It is now proposed to extend the existing formula to all hospitals on the following basis:

"Group A—teaching hospitals, up to \$1.00 per bed per day; group B—hospitals over 100 beds, or under 100 beds in a teaching area, up to 75c per bed per day; group C—hospitals below 100 beds, up to 60c per bed per day; group D—convalescent hos-

pitals, up to 60c per bed per day; group E—hospitals for incurables, up to 60c per bed per day."

This payment is for public ward beds only.

Construction

The Government of Ontario plans further to assist in the construction of new hospitals and additions to present hospitals by means of capital grants not to exceed \$1,000 per bed, including both public and private beds. In the case of chronic or convalescent hospitals the grant will be up to \$2,000 per bed.

"Thus for the first time in Ontario's history" said the Hon. Mr. Frost, "the Government is making orderly grants both for maintenance and capital costs. It is hoped that this plan will lead to the construction of hospitals not only in the large urban areas but in smaller towns and villages and, where needed, in the distinctly rural areas and the sparsely settled portions of Ontario."

Regulations in accordance with which such grants are to be made will be published in due time and these will cover such matters as types of hospital construction, loca-

tion and the proportion of public and private beds.

The above data has been gleaned from the public press but in lieu of any official release while the budget is still before the House it has been verified by Department of Health authorities and there seems to be little doubt that the estimates in aid of hospitals will be passed by the Legislature.

Already there are indications that building committees in various centres are hastily reconsidering construction plans which they had been forced to curtail for lack of funds. One can almost hear them exclaim with lifted spirit "Away with the makeshifts, let us go forward in accordance with community needs". May we point out that there is still one fly in the ointment. So far as construction this year or even next year is concerned, too great a percentage of the proposed government grant would be eaten up by the rapidly increasing cost of every commodity. Construction costs at the moment are out of all proportion to value received. Even with generous assistance from government sources, building committees would do well to step warily for the next few months.—J. F.

If Tuberculosis Beds are Limited

What Type of CASE Should Have PRIORITY?

OVER the last four decades there have been several complete reversals of opinion regarding the relative needs for hospitalization of persons with minimal tuberculosis as compared with those having advanced disease. Who shall be chosen for hospitalization and who shall be given less systematic care are questions that must be answered if the present limited supply of beds is to realize maximum use. In some parts of the country, state laws actually require that only minimal cases be hospitalized, and for too short periods of time. In other areas only far advanced infectious cases are given hospital care. Neither attitude is sound public health thinking, because both points of view do not consider the whole tuberculosis problem.

This problem is currently approached from two quite different points of view; that of the private chest specialist, who is interested primarily in the individual patient, and that of the public health official, who is concerned with the health of the entire community. Although apparently irreconcilable, these points of view are easily made compatible if certain fundamental concepts are understood and accepted. For instance, both the chest specialist and

An address given at the Hospital Conference in connection with the Clinical Congress of the American College of Surgeons in Cleveland in December.

Dr. Hilleboe is Assistant Surgeon General to the United States Public Health Service and is Associate Chief, Bureau of State Services.

**H. E. Hilleboe, M.D.,
Washington, D.C.**

the public health official must agree that a bed occupied by a person who could be supervised as an ambulatory case is a bed irretrievably lost to a patient whose disease could be arrested and prevented from spreading to others.

Basis of Sound Program

There are specific epidemiological data that must be analyzed and evaluated in any community before a sound program of efficient bed utilization can be instituted and maintained. Of great importance are the morbidity and mortality rates in determining the extent of the local problem. Equally important is a knowledge of the quantity and availability of hospital beds, clinics, nursing, medical-social, and other professional services for the care and supervision of the tuberculous. The number and distribution of physicians trained in chest diseases constitute fundamental factors in the management of ambulatory cases and in economy of bed usage. In any effective program of treatment and supervision, it is necessary to have or to establish certified laboratories in which the most trustworthy tests for the detection of *tubercle bacilli* are performed.

Such critical study provides the answers to certain questions that leaders in tuberculosis control in every community must have before they can develop and operate an effective hospital program. What is

the fundamental purpose of hospitalization of the tuberculous—isolation or treatment? Does the community, with a scarcity of beds, benefit more through the hospitalization of minimal inactive cases or of advanced infectious cases? Should communities develop preventoria for children who are heavily exposed and certain to become infected, but who do not yet have clinical disease?

The answer to the first question is unequivocal: *the protection of the health of the community takes precedence over the health of any individual.* The answer to the second question inevitably follows: *The positive sputum case must be hospitalized to prevent spread of the disease;* the earlier one finds the case, the better. Study of family contacts has provided the answer to the third question: *hospitalize the infectious adult source and thereby remove the danger of infecting children in the home.* It is easier and more economical to hospitalize one parent than three or more children.

There is a known shortage of over 50,000 beds for the tuberculous in the United States.* This condition appreciably affects the quantity and quality of care that can be given. It is not uncommon for a large area to have only 200 beds and a register of over 400 positive sputum advanced cases and twice that number with minimal disease.

**Dr. G. J. Wherrett, Secretary of the Canadian Tuberculosis Association, estimates that we have a shortage of 7,500 beds for the tuberculous in Canada.*

Who will be chosen first for these beds? How can the limited number of beds be used to greatest advantage?

It is suggested that the positive sputum cases be separated into two groups—the positive sputum case who has no hope of recovery and the positive sputum case with remediable disease. Hospitalize first the *remediable positive sputum group*. The irremediable positive sputum case could be isolated in the general hospital until the terminal episode. In this way both isolation and treatment are accomplished. In the event that such arrangements are impracticable, the hopeless case should be cared for in the home under the best isolation technique possible, supervised by public health nurses.

Advanced positive sputum cases already in sanatoria, who do not benefit from treatment, should be discharged and replaced by positive sputum cases who have a chance for recovery. Such a practice protects the community and provides the chance to restore the health of the despairing ill. The minimal case with laboratory and other evidence of active disease should be given equal opportunity with the advanced remediable case, so that progression of disease can be prevented. Minimal cases which have, after careful and repeated search, no laboratory evidence of *tubercule bacilli*, can be supervised as ambulatory patients in the clinics and the offices of physicians trained in chest diseases. The utmost care must be exercised in the supervision of these ambulatory cases. They should be observed in the clinic and should have serial x-ray examinations at frequent intervals. The clinician must constantly watch for any indications of disease progression. Indeed, this patient must come in for a check-up even when minor upper respiratory infections occur.

It may appear to be contradictory to find minimal cases and not hospitalize all of them immediately. Yet, experience shows that only a limited number of these cases break down. Careful x-ray laboratory study will enable one to select those with early evidence of progressive disease. These can be hospitalized. To hospitalize routinely all minimal cases, when hospital facilities are grossly

inadequate, is wasteful. Beds are occupied unnecessarily by people who are not sick, and the truly sick and infectious advanced cases continue to spread tuberculosis and go on to hopeless advanced disease. It does not make sense to hospitalize minimal cases of all types when prolonged follow-up studies have demonstrated that only a limited number really needed sanatorium care. Even

for the spreaders of tuberculosis whose lesions can be arrested and for minimal cases with laboratory evidence of active disease. This does not preclude the hospitalization of a limited number of minimal cases when the question of activity is still in doubt. This is in accord with changing social views on illness. It recently has been stated that we are now entering an era of synthesis of

Available beds should be used principally for the spreaders of tuberculosis, whose lesions can be arrested, and for minimal cases with laboratory evidence of active disease.

patients whose serial x-ray films show minor changes, in the absence of laboratory findings and symptoms, can be kept under control by continuous ambulatory medical supervision.

We must think of the community first and the individual next. Available beds should be used principally

two outlooks on sickness, and it is more and more widely recognized that a tuberculous patient is not only an individual in a community but a carrier of a disease in that community. We must choose carefully in terms of society if limited resources are to be utilized and a dread disease brought low.

Penicillin Pow-wow

A new departure in venereal disease treatment procedure has been inaugurated by Alberta's Department of Public Health among 150 Indians and half-breeds from the Lesser Slave Lake region. Last September, according to an article in *Canada's Health and Welfare* the Indians converged on a temporary camp near Grouard to take advantage of the provincial government's offer of free treatment for syphilis. During the previous eighteen months district nurses gave blood tests to several thousand Indians and breeds and all those having positive tests were invited to attend the treatment camp. No coercion was used in any case. All patients, men and women, received 10-day penicillin treatment, five doses per day. In addition, about seventy patients were treated with arsenic and bismuth. All were identified by number buttons and when treatment was administered the name and number were checked on a special register.

The treatment program was in charge of Dr. Paul Rentier and was under the general supervision of Dr.

M. R. Bow, deputy minister of health for the province, and Dr. Harold Orr, director of the provincial division of venereal disease control. The success of the project, the report indicates, has blazed a trail in venereal disease procedure and may well be a forerunner of similar efforts among other Canadian Indians.

**Penicillin and Streptomycin
Only by Prescription**

Penicillin and streptomycin may no longer be sold to the general public except by individual prescription from a physician, dentist or veterinary surgeon, according to an announcement made by Hon. Paul Martin, Minister of National Health and Welfare. Restrictions on the free sale of penicillin and streptomycin have already been put into effect in the United Kingdom and United States, Mr. Martin said.

The only exception in the new regulations, issued under the Food and Drugs Act, is for the sale of penicillin and its salts for oral use when they contain not more than 3,000 International Units per dose.

Hospital Architecture

- - - Yesterday and Today

ARCHITECTURE throughout the ages has been influenced in its development by geography, geology, climate, religion, and social and historical factors. Hospital architecture, in particular, has been nurtured more especially by advances in medical and scientific knowledge.

The earliest architectural recordings begin about the 15th century B.C. with the Egyptian, Assyrian, Indian and Mexican periods. It is clearly indicated that these people had in operation buildings for the sick, the lame and afflicted. The Hindus probably had a more elaborate set-up than the others as it was written in their laws that each town must provide and erect a building for the sick, including an operating room which must be kept clean and bright. One of the earliest known institutions was in Ceylon and another on the Greek Island of Cos, the birthplace of Hippocrates, which was in operation about the same time, had a medical school attached to it.

The buildings of the pre-Christian era which were used to house the sick were similar in nature and construction to the famous Greek and Roman temples of the time and so mixed were religion and healing that often religious temples were also clinics. One of the most famous of these was the Temple to Aesculapius at Epidauris. Many priests were adept in the art of healing. In Greece medical doctors were employed by

Abstracted from an address at the Convention of Associated Hospitals of Alberta, Nov., 1946.

J. A. Cawston,

Messrs. Stevenson, Cawston and Stevenson, Architects,
Calgary, Alta.

the state and these men not only practised medicine but taught hygiene and dietetics. In this period the well-known classical styles in architecture were developed—Ionian, Doric, and Corinthian—and these are used by architects today either in their pure or in modified forms.

Early Christian hospitals followed the prevailing style in construction and since the followers of Christ were very poor, they used whatever materials were at hand. Famous hospitals in this category are St. Basil at Caesarea (369 A.D.), Hôtel Dieu at Lyon and the Hôtel Dieu of Paris which was built in 660 A.D. Walls were of stone and concrete, faced with brick, stone or plaster. Classical columns were used and openings were planned with flat lintels or semi-circular arches.

Next came the Gothic period which added little of advantage to hospital architecture. Wards were large, ventilation was poor and rooms were heated by charcoal stoves. Floors and walks were of brick or stone and the stained glass windows of the period admitted practically no light.

Part of the Hôtel Dieu of Paris is in the Gothic style and it is interesting to note that it consisted of four main wards 22' wide by 240' long with several smaller annexes, and contained 1,200 ward beds. Each bed accommodated four to six pati-

ents, with no segregation of the dying from the convalescent or the communicable diseases from the clean ones. There were also, fortunately, 500 single beds.

During the seventeenth century several hospitals were built on this continent, including the Hôtel Dieu at Quebec and the Hôtel Dieu in Montreal.

Our modern hospitals spring from the 18th century for it was not until then that trends in building were at all affected by the demands of science and of medicine. From that time on some attempt was made to provide facilities for diagnosis and treatment as well as for nursing care. Many changes in design were also brought about by the introduction of steam heat, sterilization, elevators and other mechanical devices.

We come now to the pavilion period in hospital architecture. The single pavilion, used largely in England, was actually composed of two wings placed end to end with space for administrative and service facilities in between. The double pavilion had a main building for administration and the various services, with two adjoining pavilions for patients. Hospitals of this type were built throughout Europe, Asia and also North America. The next development was the multiple pavilion type, where many pavilions were joined to the main administrative building by enclosed corridors. This style works very well for purposes of segregation and has been popular on this continent. At the same time, experiments were carried out in planning wards in circles or ellipses, with the services in the middle and the beds radiating out from these services.

There followed a vogue for isolated pavilions. Groups of buildings with no connecting corridors were built, each unit serving a specific purpose. In most cases these buildings have long since been joined up by corridors or tunnels.

The more recent block style of hospital was developed in the United States. This type of building has been used in a variety of layouts. It may be in the shape of T, L, V, or just plain square. It is adaptable to hospitals of various sizes and provides a large percentage of bed space.

The most modern form for very

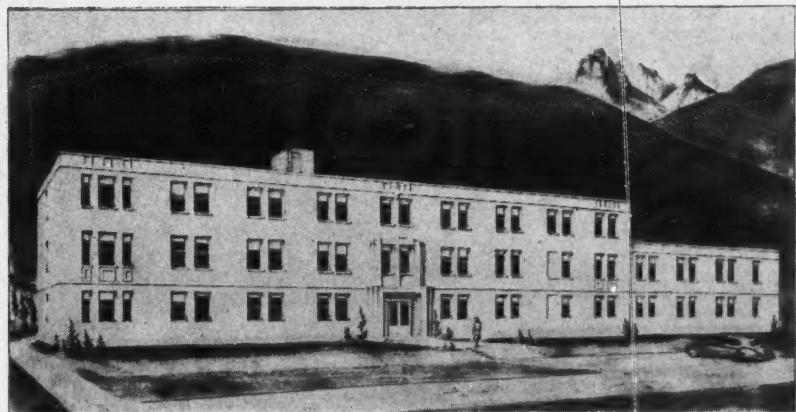
large hospitals is the composite or multi-storey building, the Maltese or St. Andrew's cross, or variations of these. This style offers the architect the opportunity of developing large bed capacity units on small land areas with the best advantages for sunlight and air circulation. It also places all the patients' beds and services under one roof, and allows centring of the service units which reduces transportation distances and makes for efficiency of operation. The United States led in this development as it seemed to meet medical demands and also conformed to the modern American vogue for skyscraper architecture.

Present Trends

It is difficult to predict which of the many ideas now being worked out constitute significant development and which are superficial experiments, soon to be forgotten. Two general trends are apparent. First, planning is aimed toward a broader service to patients, including both preventive and curative medicine and taking into consideration mental and social factors as well as physical treatment. Most social legislation contemplates widely expanded health services centring around hospitals. Also the consensus is strong for reducing the size of wards and increasing the number of private and semi-private rooms.

The second noticeable trend is toward larger nursing units, grouped around more highly centralized services. Centralizing for efficiency is marked up to a point and, especially in view of current labour shortages, it is the general opinion that more centralization is needed.

Twenty-five years ago it was the custom for the building committee of a hospital contemplating construction to make junketing trips to larger hospitals and medical centres. These were usually prominent citizens who knew little or nothing about hospital planning and each would insist upon having incorporated in the new building whatever feature happened to impress him as important. This explains in part at least the illogical arrangements with which superintendents have to contend in some of our older institutions. Fortunately, for the betterment of hospital service, a number of architects and most administrators have become deeply



Crow's Nest Pass Hospital

Above is a drawing produced by the architects, Meech, Mitchell and Meech, Lethbridge, Alberta, of the Crow's Nest Pass Municipal Hospital as it will appear when constructed! For many years the great need for a hospital to serve the Pass towns and the surrounding mining areas has been sadly felt and in 1944 plans for construction of such an institution were begun. There has been much delay due to shortage of labour and material but it is hoped now that work will get under way within a few months.

The building will be of concrete

slab and frame with brick curtain walls and tile interior partitions. It will provide accommodation for 60 patients and has been designed to service a mining area where serious accidents occasionally involve a heavy load on the facilities of the building. The nature of the plan has been dictated also by the necessity of attaining the greatest amount of space for the least possible expenditure compatible with first class construction. It is expected that the building will cost approximately \$275,000 including equipment.

interested in the basic philosophy and the technique of hospital planning. They recognize that each hospital is a separate problem and that a hospital is the most complicated type of building which is designed with any degree of frequency. It is complicated because the hospital is a scientific institution, a social and charitable institution, a business and an educational institution, all rolled into one.

The day is past for constructing a beautiful exterior and cramming hospital facilities into it whether it is appropriate or not. The modern institution must be planned from within so that it makes provision for ideal service to the patient as conceived in the minds of those engaged in caring for the sick. This can only be achieved by the closest co-operation from the beginning of the project between a competent hospital architect and the administration. This is true of all hospitals whether

large or small because each has similar problems to solve and requires the same technical knowledge in solving them.

The designs of earlier ages were in the familiar styles of their day—Italian and Spanish Renaissance, Gothic, Tudor and American Colonial. Modern designs, while ever symmetrical, are purely functional and resemble more closely a twentieth century bus terminal or aeroplane hangar. There is little or no expensive decoration applied to the exterior. Unfettered by preconceived ideas of what the external appearance must be, architects are attacking the problem directly with the thought of meeting the basic requirements of hospital care. The new approach is in line with a trend common to the whole field of architecture today in that it promotes efficiency and eventual economy even though the initial outlay may seem to be very large.

Laundry Problems in the Hospital

TO those not familiar with hospitals there is an idea that the chief purpose of the laundry is to provide the staff with immaculately clean uniforms and the hospital in general with clean bedding and table linen. Actually, the chief purpose is to prevent the spread of infectious organisms in the hospital—most particularly in the nursery. Many patients, especially babies, develop rashes which are puzzling to the attending physician. Some of these rashes can be attributed to the laundry, due to the fact that residual alkali in bed linen is a definite irritant when it comes in contact with perspiration of a high acid content. These rashes appear on the dependent parts—hips, elbows and heels—and also on the appositive surfaces, especially in the armpits.

Machinery and Supervision

A laundry can supply all departments and personnel only if it has sufficient machinery and proper supervision. The amount of linen used in the average hospital will vary from seven and one-half to ten pounds per patient daily. This figure includes linen from all departments and in calculating the amount it is wise to add twenty-five per cent to the bed capacity to enable the laundry to meet extra or emergency demands without too much inconvenience.

The proper maintenance of laundry machinery is very essential and a complete check of all machines should be made at least once a week. All badly worn parts should be replaced or adjusted as soon as possible and all moving parts should be well oiled or greased as often as required. This

An Address given at the Convention of The Associated Hospitals of Alberta, November, 1946.

D. Schneider,

**University of Alberta Hospital,
Edmonton.**

is essential for good operation and long life of machines.

Laundry Requirements

The laundry needed for a three hundred and fifty to four hundred bed hospital would be a plant able to take approximately thirty thousand pounds of linen a week, or five thousand pounds each working day if the laundry works a six-day week. The washroom would require:

- 2 washers, size 42 x 84—300 pound capacity.
- 1 washer, size 24 x 36—35 pound capacity—two speed.
- 1 extractor, size 48 inches—250 pound capacity.
- 1 extractor, size 30 inches—60 pound capacity.

To iron and dry this amount of linen would require:

- 1 six roll mangle.
- 3 tumblers 30 x 36 inches.
- 2 sets air drive or 3 sets foot or hand operated presses.
- 3 ironing boards and irons.
- 1 blanket dryer or dry house.

For a fifty to seventy-five bed hospital:

- 1 washer 36 x 54—100 pound capacity.
- 1 washer 24 x 36—two speed.
- 1 extractor, 26 inches—50 pound capacity.
- 1 tumbler, 30 x 36—35 pound capacity.
- 1 roll mangle or 1 set of flat work presses.
- 1 set uniform presses.
- 1 dry house.

For a twenty to thirty bed hospital:

- 1 washer, 30 x 36—50 pound capacity.
- 1 extractor, 26 inches—50 pound capacity.
- 1 tumbler, 24 x 36—26 pound capacity.
- 1 set presses.
- 1 dry house.

Washing

The first thing to consider when washing clothes is the water supply and the condition of the water. Wash-

ing with hard water takes more soap and alkali and turns out a poorer quality of work. It is harder on the clothes than soft water, so it is a good practice to soften the water before using it in the laundry. This is done by running the water through a Zeolite water softener or by adding alkali to the water before the soap is put in the washer. The amount of alkali used with soap varies in different localities, but as a general rule two parts of soap to one part alkali will do a good job of soil removal. Soap used in the laundry should be of good quality. To insure good colour and for sterilization, bleach must also be added for all white cotton and linen. One quart of one per cent available chlorine bleach for each hundred pounds of clothes is sufficient. Too much bleach and too little rinsing can do a great deal of damage and the process should be carefully supervised.

Standard Washing Formulae

It is not practical to set a standard washing formula for any laundry without first knowing the water conditions and the type of clothes to be washed, but the average hospital laundry can do good washing with the following formulae:

For white cotton or linen

- 12" flush in water 90 degrees—2 mins.
- 1st suds: 5" water, 120 degrees—10 minutes.
- 2nd suds: 5" water, 160 degrees—15 minutes.
- 3 hot rinses: 12" water 140-160 degrees—15 minutes.
- 2 cold rinses: 12" water tap temperature—10 minutes.

Sour and Blue in last rinse. Add the bleach in the second suds.

For coloured cotton or linen

- 1st suds: 5" water, 110 degrees—10 minutes.
- 2nd suds: 5" water, 110 degrees—10 minutes.
- 2 rinses: 12" water, 110 degrees—10 minutes.
- 2 rinses: 12" water, tap temperature—10 minutes.

For fast colours higher temperatures may be used.

For wool or silk

- 1st suds: 18" water, 90 degrees—5 min.
- 2nd suds: 18" water, 90 degrees—10 minutes.
- 3 rinses: 18" water, 90 degrees—15 minutes.

A neutral soap should be used for wool and silk and no alkali. Machine should be stopped when draining or filling washer.

Dr. Vant's Formula for nursery baby linen

Cold water flushes: 12" water—5 mins.

1st suds: 5" water, 120 degrees—10 minutes.
2nd suds: 5" water, 160 degrees—15 minutes.
3 hot rinses: 12" water, 160 degrees—15 minutes.
2 cold rinses: 12" water, tap temperature—10 minutes.

Drop water in last rinse to two or three inches and add one pound Bicarbonate Soda for each one hundred pounds clothes and let run 3 to 5 minutes. Only neutral soap is used. No bleach. No blue.

Blood stained linen.

All blood stained linen should be rinsed in water 90 to 100 degrees until clear, then washed as follows:

1st suds: 5" water 90 to 100 degrees—5 minutes.
2nd suds: 5" water 120 degrees—10 minutes.
3rd suds: 5" water 160 degrees—15 minutes.
3 hot rinses: 12" water 140 to 160 degrees.
2 cold rinses: 12" water—tap temperature.
Bleach in third suds. Sour and blue in last rinse.

All linen and dressings that are saturated with ointment, vaseline or grease, should be washed as follows:

1st suds: 5" water 110 degrees—high P.H.—10 minutes.
2nd suds: 5" water 130 degree—high P.H.—10 minutes.
3rd suds: 5" water 160 degree—high P.H.—10 minutes.
4th suds: 5" water 180 degree—high P.H.—10 minutes.
5th suds: 5" water 160 degree—add bleach—10 minutes.
4 hot rinses 12" water, 160 degree.
2 cold rinses, 12" water, tap temperature.

The amount of alkali used can be determined by the results.

Contaminated Linen

Contaminated linen must be handled with care. There are several methods: soaking in a disinfecting solution before sending to the laundry; fumigating the linen before washing; or by placing galvanized cans with tight lids in the wards into which contaminated linen is placed dry. These cans can be emptied directly into the washing machine without touching the linen by hand and by using high temperature and chlorine bleach in the washing, all germs will be killed. Cans must be sterilized after emptying.

Tips on Production

To make sure that the right amount of supplies are used and in order to maintain uniformity, all supplies used in the laundry should be weighed or measured. To obtain an even mixture of soap and alkali boil liquid soap and alkali in a barrel or drum. A good stock soap is made

by boiling approximately twenty pounds of soap, plus the alkali, in forty gallons of water.

A common fault with inexperienced help is to overload the washers. This is poor economy—more supplies are used and a poor quality of work results.

Mangle production can be speeded up by partially drying all heavy spreads, flannelette sheets, pillow cases, or any linens that go through the mangle twice. These should be run in the tumblers until nearly dry, leaving just enough moisture to iron. Once through the mangle will do the job in half the time.

When lighter sheets of good quality are available it is false economy to purchase the heaviest grade. As an example, a washer with three hundred pounds capacity, will wash only one hundred and fifty sheets that weigh two pounds, but will wash two hundred sheets that weigh one and one-half pounds—an increase in production of twenty-five per cent with no increase in supplies or time costs. Lighter linens can be ironed at greater speed also.

Kier Boil Method

Linens are often discarded because of unsightly stains although the fabric may be strong enough for months of useful service. Most of these stains can be removed by using the Kier Boil Method, which can be

applied in the washer or in an open tank equipped with a steam line. After removing all loose soil and blood in the regular wash, place linen under the surface of the solution (high water level should be used whether in washer or tank). For each hundred gallons of water add twelve and one-half pounds each of soap and alkali, and after thoroughly dissolving put in linen to be treated, bringing to the boil and keep boiling from six to eight hours. At the end of boiling period place linen in washer if tank was used and in three inches of water at 160 degrees, add six quarts 1 per cent bleach for each hundred pounds of linen and run fifteen minutes. Give four hot rinses—12"—160 degrees. Follow this with oxalic acid bath. In 3" of water, 180 degrees, use one pound of oxalic acid for each hundred pounds of linen, run fifteen minutes, then give hot rinses 12"—160-170 degrees, and two cold rinses 12"—tap temperature.

Water Repellents

The use of water repellents is one of the newer developments in the laundry. When applied to fabrics, these repellents surround the fibres with a protective coating of wax which keeps stains from becoming deeply set and the stains remain on the surface. This makes washing and

(Concluded on page 92)



In the Laundry at L'Hotel Dieu, Windsor, Ont.



CANCER . .

The Spectre

of Waste

FRANCE is organizing for battle—against the enemy, Cancer, which within the space of ten years has taken an average yearly toll of 40,000 lives. France is not closing her eyes to the monumental task ahead, possibly the apparent waste of vast sums of money; instead she is looking the cancer spectre in the eye and beyond, and seeing the very essence of waste—the waste and destruction of 40,000 human lives each year. This country faces the cold facts that, if the average human worth is ten thousand dollars (as statisticians calculate), then the destruction of millions of francs worth of life yearly will continue unless something is done. The French people are fighting many odds in this post-war period and not least among them is the problem of national health.

Faced with a death rate from cancer which now exceeds that of tuberculosis the gravity of the situation has alarmed public health and medical authorities. For years France saw the wholesale destruction of human beings through modern warfare; she is sick of waste. Against this background of suffering, it is as

ABOVE: Insertion of radium needles for the treatment of cancer of the lip—Cancer Inst. of Paris.

Phyllis Wilson,
French Information Service, Ottawa.

if she is saying to her men of medical science: "In the past you have carried on magnificently, despite the war's crippling pressure on your work; but now you have another urgency upon you, the pressure for speed. Unless you hurry forty thousand more Frenchmen will die this year."

The cancer fight program has been spurred on by latest available figures, which, together with Canadian statistics for the same period of time show the toll taken by cancer in the two countries: (See Table)

Medical authorities suspect the figures may be even higher because the disease has been inaccurately diagnosed or has not been entered on death certificates out of respect for certain family prejudices.

Everywhere the social character of

the disease and the inadequacy of the present means to fight it are being emphasized. Public Health authorities point out that victory over cancer depends upon it being tracked down and diagnosed as such in its early stages; that patients who are treated too late become charges on the community throughout long periods of suffering; that treated patients should be carefully watched for five years since the post-cure period of cancer is just as important as for tuberculosis; that occupational cancer, due to contact with certain substances like coal tars and pitches, asbestos dust, aniline derivatives and radio-active material, can be prevented by rigorous enforcement of industrial hygiene; and that heredity or predisposition to the disease, if not a scientific fact, nonetheless, poses the problem of listing families where there have been several cases of cancer.

Comparative Deaths from Cancer

Year	Deaths	France	Total per 100,000	Canada
1936	44,267	106	107.0	
1941	58,435	116.8	
1942	60,210	162	117.3	
1943	59,222	160	119.8	
1945 (1st 6 months)	26,987	141	119.1	

(Preliminary figure for year)

Central Administrative Council Directs Attack

Against this background, steps are now being taken to implement the statute passed by the Provisional government on October 1, 1945, with the object of *co-ordinating and placing on a permanent basis* present efforts to fight cancer. Since the Act provides for an overall plan directed by a central administrative council the result should be *joint action and financial independence*, lack of which has up to now hindered the attack. At the same time the existing anti-cancer centres will continue to derive benefit from their civil status.

Each centre will be responsible for a particular geographic area so that the whole country will be covered. Legislation is planned to encourage young doctors to specialize in the cancer field.

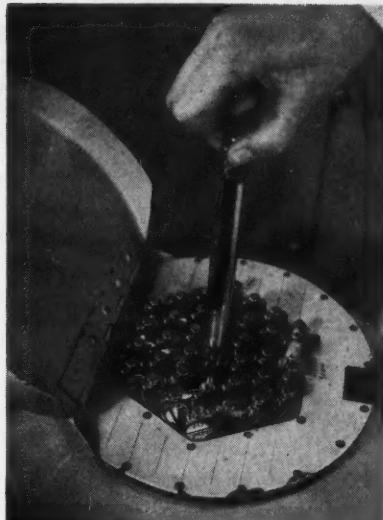
To qualify for official recognition and financial aid from the government, each centre must be engaged in *any two of the following functions*:

1. Investigation, examination, hospitalization and treatment of the sick.
2. Continuous checking of cure results and medico-social work.
3. Research on etiology, prophylaxis and cure of cancer.

Moreover, each centre must have a surgical and radiological service at least and be able to secure help from a cancerologist, an oto-rhino-laryngologist and an anatomophysiologist.

The Battle Against Cancer

The battle against cancer in France is being fought on two fronts. On the first, the business of tracking down the disease has proven most difficult. Up until now responsibility for early diagnosis has been left to individual initiative—most cancer centres concentrating on the subject of therapeutics. French national railways have done a fine job in providing examinations for the disease while the Mutualist Federation of the Seine has uncovered *one case of cancer in every 33 persons examined*. French health authorities have been studying American propaganda to educate the public and the practice of certain insurance companies to insist on periodic examinations to facilitate early diagnosis. In addition the Ministry of Public Health plans to increase the number of anti-cancer



ABOVE: Mobile radium container. The radium supply is kept in this steel container which is lined with lead 10 centimeters thick. It holds 37 cases in which radium tubes and needles are kept. The container which is easily moved is placed on the platform of a special elevator which stays underground and which can be brought up at a moment's notice to the room where the radium instruments are used.

dispensaries and to create a skeleton staff of specialists.

Once the disease has been exposed and identified the battle can be waged

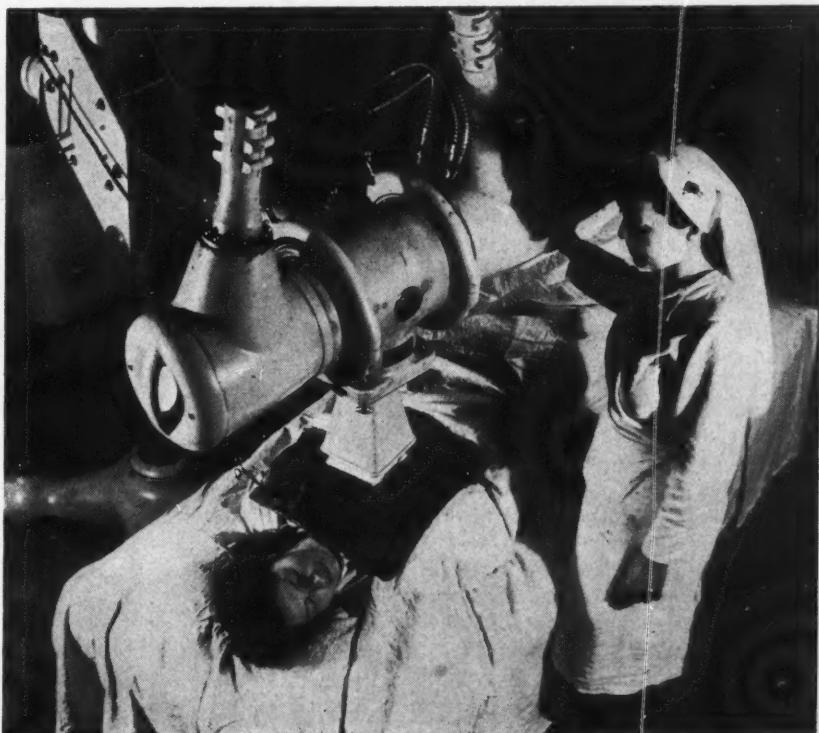
on the second front—in centres devoted to accurate diagnosis and cure. During the past twenty years the organization of sixteen centres has been left to private enterprise with public assistance. In Paris the Cancer Institute, Curie Foundation and Anti-Cancer Centre, have performed notable service in the clinical as well as the research field. On the social plane the medico-social service organized by the Cancer Institute now provides *material help for patients' families*, as well as superintending the regular treatment and post-cure care of cancer patients.

Outside of Paris the provincial centres vary in size and importance. Operated principally for diagnosis and cure, they do not concern themselves with tracking down the disease or with providing post-cure supervision. However, they have had to face innumerable difficulties— inadequate quarters and medical staff, and an undefined legal position—so that extension of their work has been impossible.

The Cancer Institute of Paris

Since the war the Cancer Institute of Paris has survived various trials and has been able to carry on most

(Concluded on page 92)



ABOVE: Radiotherapy treatment with a 200-kilovolt machine on a lesion of the breast.

Certification of All Laboratory Technologists Desirable in Public Interest

IN the fine laboratories boasted by our modern hospitals, scientific research has created, through its demand for technologists, a comparatively new profession. The efficient technologist will perform with exacting precision and meticulous care that wide variety of complicated technical procedures which aid the physician in the diagnosis of disease. In the beginning, before university training or other prescribed courses were available, technologists were drawn from all walks of life and were taught in the laboratories where they worked. From the ranks of those early pioneers, many outstanding technologists rose to occupy positions of trust and responsibility.

This easy access to a field of professional endeavour opened avenues of learning to a large body of men and women who became technologists, regardless of any educational or personal qualifications. Training was not obtained by means of any clearly defined curriculum but was apt to be determined by the personal reaction of the instructor to the student. When the student had served his apprenticeship, he was given a letter of recommendation and set out to make his mark as a technologist. He was not required to submit to an examination which would test the extent of his knowledge or to produce any proof that he had served a requisite period of instruction.

Such haphazard training can no longer be condoned because the responsibilities assigned to the tech-

*Address given at pre-Convention
Administration Course, Vancouver,
B.C., November, 1946.*

**George Darling, President
Canadian Society of Laboratory
Technologists, Nanaimo, B.C.**

nologist may materially affect the welfare of the patient or, if inaccurately carried out, may be misleading to the doctor. The technologist is not permitted to make a diagnosis but his analytical findings frequently make the diagnosis self-evident, as for example, the finding of a specific organism in a bacterial smear or culture, such as a gonococcus, the bacil-



lus of tuberculosis, or a haemolytic streptococcus. His report on a typical diabetic curve from a glucose tolerance test or the characteristic findings of a blood smear from a patient with pernicious anaemia is

diagnostic from the physician's point of view.

The field covered by the technologist demands a knowledge of haematology, serology, bacteriology, pathology, parasitology, biochemistry, the electrocardiograph, basal metabolism, gastric analysis and a variety of chemical procedures. Such a field obviously makes it imperative that technologists be properly trained and certified.

Setting of Standards

Some twenty years ago, the American Society of Clinical Pathologists, recognizing the need for set standards of education in the technical branch of the field, established a Registry of Technologists in the United States. Under the aegis of the Society rapid advances were made; standards were gradually raised until today at least some university training in the basic sciences is required before candidates are accepted by the Registry. Examinations are conducted semi-annually. The American Medical Association and the American College of Surgeons recommend that technologists engaged by approved hospitals be certified by the American Society of Clinical Pathologists. Thus the status of the technologist has been established by these authoritative medical bodies, through the American Registry.

The C.S.L.T.

In Canada the status of the technologist was just as vague as it was in the United States in years past and this is still so to an alarming extent. There has been no unified control either provincially or throughout the Dominion as a whole and, with one notable exception, this large group of professional workers in hospitals has been without any official organization. Now over 700 Canadian technologists are actively associated with the Canadian Society of Laboratory Technologists. Sponsored by Dr. William J. Deadman, a pathologist of Dominion-wide repute, a nucleus committee of technologists petitioned and were granted a federal charter of incorporation in 1937. Technologists were invited to become members of the Society, after presenting proof of satisfactory training and a recommendation from

(Concluded on page 90)

Aims of the Canadian Society of Radiological Technicians

IT has been suggested that a brief description of the activities of the Canadian Society of Radiological Technicians would be timely now that post-war reconstruction on the hospital front is under way.

Eight Canadian provinces have their own society of x-ray technicians. In some cases these have been functioning for a number of years; in others their formation has been more recent. All are members of a Dominion society, incorporated under Letters Patent in May, 1943, as the Canadian Society of Radiological Technicians. The affairs of the Society are administered by a Board of Directors, the members of which are appointed as follows: One member appointed by the Canadian Medical Association, one by the Canadian Association of Radiologists, one by the member-societies and two by the general body of the members.

The primary object in the formation of this Society is to raise the standard of radiographic work and to maintain a uniformly high standard in all parts of the Dominion. Matters pertaining to the administration of x-ray therapy under the radiologist's supervision are also dealt with. The work parallels that which has already been accomplished during the past 15 or 20 years by the American Society of X-Ray Technicians and the American Registry, and by the British Society of Radiographers. In both these countries radiologists state that the marked superiority in radiographic work

Mr. Cartwright is editor of "The Focal Spot" official organ of the Canadian Society of Radiological Technicians.

L. J. Cartwright,
Toronto.

done by members of these associations has led to preference being given to qualified members of these societies when technicians are being engaged. In passing, it is interesting to note that already a number of radiologists in Canada are making membership in the Canadian Society of Radiological Technicians a prerequisite of employment.

With this primary need in mind the C.S.R.T. has, with the co-operation of the radiologists, prepared uniform examination papers for the whole Dominion. These are taken following a minimum two-year student period, the curriculum of which includes physics, the Electron Theory as it pertains to x-ray tubes, x-ray apparatus, electrical and radiation dangers, anatomy and physiology, terminology and nomenclature, radiographic technique, practical radiography, processing procedure, ethics and departmental procedure, therapy apparatus, measuring instruments, factors affecting intensity delivered to the skin and factors affecting depth intensity. The secretary of the C.S.R.T. will be glad to send a copy of the complete syllabus and membership application form to any who are interested, or it may be seen in the July 1946 issue of *The Focal Spot*, available in most medical libraries. Since the formation of the Society 66 student members have taken the examinations, which are held semi-annually. On qualification the student becomes a registered technician and should be well grounded

in the duties of an x-ray technician from both the technical and the ethical standpoint.

The Dominion Society has held four annual conventions in various provincial centres with representatives in attendance from the eight provincial societies. The individual provincial societies hold frequent meetings in their own localities, at which radiologists and technicians give papers and technical demonstrations.

The Society also publishes a quarterly journal, *The Focal Spot*, with a circulation of nearly 1,200. This carries technical articles and news of the provincial and Dominion activities and serves to inform members on technical matters and to weld the various provincial societies into a coherent whole, as embodied in the C.S.R.T. We endeavour so to conduct the affairs of our Society that those employing x-ray technicians will feel confident that in engaging a member of the C.S.R.T. they are securing the services of a fully-trained technician.

I am grateful for this opportunity to bring before a larger audience the efforts of the x-ray technicians to improve their particular branch of that complex structure, the services of which constitute modern hospitalization.

Central Rh Laboratory

A new laboratory, the first of its kind, has been established in Baltimore to act as a clearing house for the widespread testing of the Rh factor in the blood. The laboratory is under the jurisdiction of a committee of six members of the Obstetrical and Gynaecological Section of the Baltimore City Medical Society. It is a privately-sponsored, co-operative community venture, and its services are offered free of charge to the dispensary patients of any hospital within the city and to patients of the City Health Department Obstetrical Clinics. Private patients pay \$3 to \$5.

Other benefits of the laboratory include the maintenance of a supply of blood serum from Rh-sensitized patients; the accumulation of a large list of Rh-negative men of all blood groups who are willing to serve as donors, and the application of Rh tests in disputed paternity.

Auxiliaries —

Now and Then

IN the Children's Hospital our auxiliaries are called *Guilds* and their affiliation with the Hospital was written into the constitution and by-laws. It would seem only natural that this should be, as the idea of a hospital exclusively for children was conceived by one woman and she, with a small group, obtained *through auxiliary methods* the funds to make it possible. Since the hospital was established with a Board of women, it follows that they would adopt similar methods in obtaining funds for maintenance. Moreover, with a board exclusively of women there could be no opposition to participation of women in the affairs of the hospital—as could occur in a board not so constituted.

That the need for this form of support was great is reflected in our financial statements, where it is shown that in the early years by far the major portion of the annual income was through donations, bazaars, teas and other efforts. Many of the necessities for care of the patients were provided by the personal work of the women of these groups.

Since the hospital opened thirty-seven years ago, I can safely say that at least \$250,000 were contributed directly to the hospital by the Guilds and the amount received indirectly through their public relations activities could easily equal that sum. From our annual Violet Day alone, which was carried on for fourteen years, we received nearly \$75,000. These figures include only the contribution from our Guilds which devote their entire activities to the welfare of the hospital. Many other organizations have contributed liberally to the hospital, in addition to their other work, and we appre-

ciate the fact that the care of the sick child has an exceptional appeal to the community in general.

The work of our Guilds was somewhat restricted following the organization of the Community Chest but the combined efforts of our members in the Chest Campaigns helped to replace other activities. During the years of depression it was found necessary to resume some of these activities in order to augment the decreasing income and to meet the increasing needs for hospital service so pressing in times of economic stress. These activities have since been carried on and our Guild membership has increased. It must be remembered that the Community Chest assistance is confined to *maintenance only* and there is always the necessity for capital expenditure to maintain a standard of service commensurate with the increasing scientific demands in medical progress.

The hospital has often faced heavy deficits and these have always stimulated our Guilds to greater efforts.

Our Guilds work in similar ways to other auxiliaries—although possibly our scope of activities is wider. We have now six Guilds; each has its own organization and plans its own year's work. All have different programs for raising funds; some prefer to assist by making necessary articles and obtaining money by various means within their own group and amongst friends, others plan projects from which they derive fairly large sums. All, in some way, have identified themselves with the hospital by endowment of beds,

wards or annual maintenance of beds. Younger groups like to contribute by personal contact with the patients in promoting social and recreational activities for them. Some Guilds have obligated themselves to full or partial maintenance of some department of the hospital in which they are particularly interested.

Each Guild has a representative attending the board meetings who presents a full report of the year's activities at the annual meeting. Projects which make public appeals are reported and all such projects must meet with the approval of the board of directors. *This is essential* to ensure that the name of the hospital is not inadvertently used for the benefit of any non-charitable body.

In our six Guilds we have a membership of 245 and we are expecting to add more Guilds in the near future. As they grow in number we can foresee the need for some means of liaison between the Guilds—possibly by a co-ordinating committee through which could be planned activities to prevent duplication of ideas or overlapping. Such a committee would also assist in organizing Guilds in the combined-efforts program necessary for some major project. Through it, too, could be maintained a central contact with the hospital executive staff with whom our relations have always been most cordial.

In conclusion, I sincerely commend to your earnest consideration the value of co-operation between the board, hospital personnel and members of the women's aid organizations. It is felt that in the field of public relations the hospital has *no greater asset*.

Hospital Sugar Supplies Raised

The recent announcement from the Wartime Prices and Trade Board indicates that consumers will be allowed four pounds more per person of either sugar or preserves throughout the balance of the year.

At the same time a ten per cent increase will be granted to industrial users, bringing their sugar supplies nearer to their 1941 usage. Similarly, quota users such as hospitals, hotels and restaurants will also have their sugar supplies increased by ten per cent over the balance of the year.



The picture above, drawn in 1870, indicates that although the ladies went about their voluntary tasks in a radically different manner, the compulsion to meet social needs was as strong then as it is today. In the last century progress in medical science revealed the need for hospitals which would be centres for diagnostic and therapeutic work as well as shelters for the poor. Such an institution was founded by the Ladies' Hospital Association of the City of Paterson in New Jersey and, in their present capacity of Woman's Aid, the ladies of Paterson still serve that hospital well.

—Courtesy, The Paterson General Hospital Association.

Who Should Pay Nurse Training Costs—

The Patient or The Community?

OVER ninety-five percent of the qualified registered nurses in Ontario are trained in hospital schools of nursing, and figures in other provinces would be comparable or even higher in those provinces where there is no university undergraduate nursing course. The cost of the basic training and education of this essential worker has been and still is the full and complete responsibility of the hospital conducting the school and is charged into the cost of patient care. With private philanthropy seriously reduced of late years, with voluntary effort in fund-raising in support of hospital and nursing schools tapering off, and with an ever-increasing and urgent need for more qualified registered nurses to meet present demands for nursing in all branches of the service, the nurse education program is a matter of deep concern to hospital trustees and administrators. It is time that we review the present set-up and obtain as quickly as possible facts and figures pertaining thereto.

How many nurses are now available?

Using figures from a recent Ontario survey as an example, we learn that 17,200 qualified nurses paid the Nurse Registration fee in 1946, and that only 10,000 of this number were actively engaged in nursing. Of these, 4,000 were employed on hospital staffs as supervisors, instructors and general duty staff nurses. There are 1,200 to 1,500 vacancies on hospital

Priscilla Campbell, Reg.N.,

Chatham, Ont., President,
Ontario Hospital Association

staffs at present, and a similar number of unfilled positions in other branches of nursing in the province. Student enrolment in 1946 was registered at 4,700—an all-time high—which means an average of approximately 1,200 nurses qualifying each year. It would take considerable time at this rate to catch up with present needs, to say nothing about proposed expansion programs in all branches of health service, including hospitals and schools for student nurses.

How many nurses are needed?

According to present figures, Ontario is short between three and four thousand qualified registered nurses in 1947. To estimate the needs of tomorrow requires vision, courage, wisdom and a master plan. There must be Canadian facts and figures available to serve as guides in drafting plans to meet present and future needs. It is our opinion that this task should be undertaken promptly if we hope to have the services of the qualified registered nurse available to meet health needs across Canada.

What are present methods of training?

As we have seen, over 90 per cent of our registered nurses are trained in hospital schools, where they take a three-year course of instruction in theory and nursing practice, with about fifty per cent of the time spent

in classes, lectures, demonstrations, study periods and practice nursing, and the balance of the time going into service nursing used in the care of patients. For this service the student nurse receives a small honorarium, her board, room, laundry, health care and education. It would be a matter of interest and satisfaction if we could know just what value in dollars and cents should be put on the student's nursing service after the theory and practice nursing period has been successfully completed.

What does the present nurse education program cost per student?

If anyone in the hospital school has the answer to this vexed question, will you please share the information with us and include the formula by which you found the answer.

Who pays the bill?

Under the present system in most hospitals, the *patient* using semi-private and private accommodation in the hospital pays for the educational program of the student nurses. Few, if any, hospitals have any other means of support.

Besides hospitals, who employs the qualified nurse?

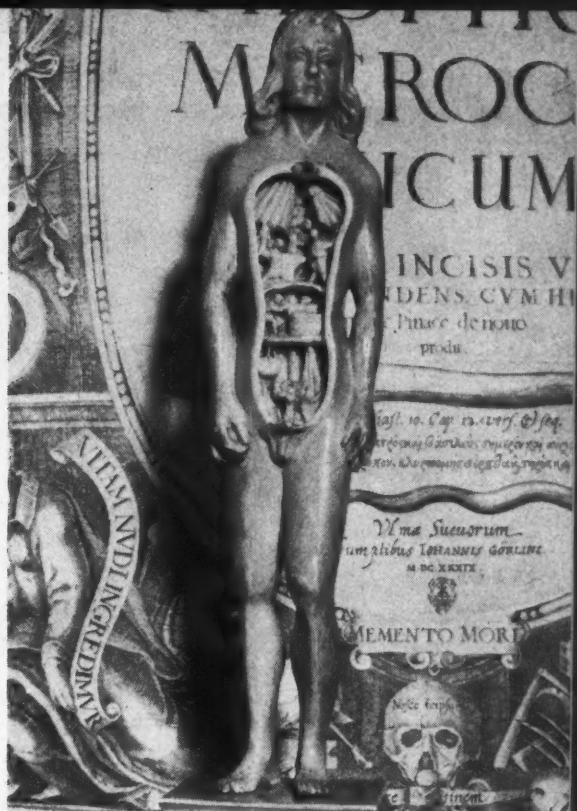
Many new fields of employment have been opened to the registered nurse. Commerce and industry have been quick to discover the value and utilize the services of this trained worker in maintaining a health program for employees. Air transportation systems find that the presence of the trained nurse inspires confidence, is reassuring to the apprehensive passenger, and is comforting and helpful to the sufferer from air sickness. Public health organizations employ large numbers of qualified registered nurses, and a great many others are in the service of the Department of Veterans Affairs.

None of these employers of the qualified registered nurse contribute to the cost of the basic educational program.

Is it quite fair that less than ten per cent of the population who, through the misfortune of illness, find their way into a hospital should have to pay the full cost of the nurse educational program when this service must be kept available to the whole population? We think the *community* should bear the cost of basic training for the student nurse.

Anatomical Figurines

A Neglected Chapter in the History of Anatomical Illustration and Instruction



ANATOMICAL illustration and instruction is an aspect of historical medicine which was in part even unfamiliar to the late Dr. Fielding Garrison, whose *Epitome of the History of Medicine*—a really monumental work in spite of its modest title—does not contain even a paragraph on certain parts of my subject. In Mortimer Frank's translation of Choulant's *History of Anatomic Illustration*, this same Dr. Garrison wrote a chapter on the use of plastic material in medicine restricted to ancient marble and metallic votives. However, his article makes no mention of the figurines which are the subject of this article. These were prepared and used during the 17th, 18th and the early part of the 19th centuries for the purpose of teaching anatomy and midwifery—obstetrics.

Aristotle's description of the isolated organs of lower animals was faulty to ridiculous in many instances; and the famous Galen performed his dissections, partly on dogs, but usually on swine. Galen did make a rather difficult trip from Rome to Alexandria to view a human skeleton, but had no knowledge of the form and relationship of the internal organs of man. In the Rome of his day human dissection was not permitted. His animal experimen-

Arno B. Luckhardt, M.D.,
Chicago, Illinois.

tion was likewise restricted to dogs, apes and swine, as the result of which he made many fundamental discoveries and some errors.

The physicians who followed Galen attributed his work to human dissection and his writings, necessarily devoid of illustrations, constituted as sacrosanct a volume on medicine as is the Bible today to a Fundamentalist. For some thirteen centuries no one but a medical heretic would doubt his "ex cathedra" state-



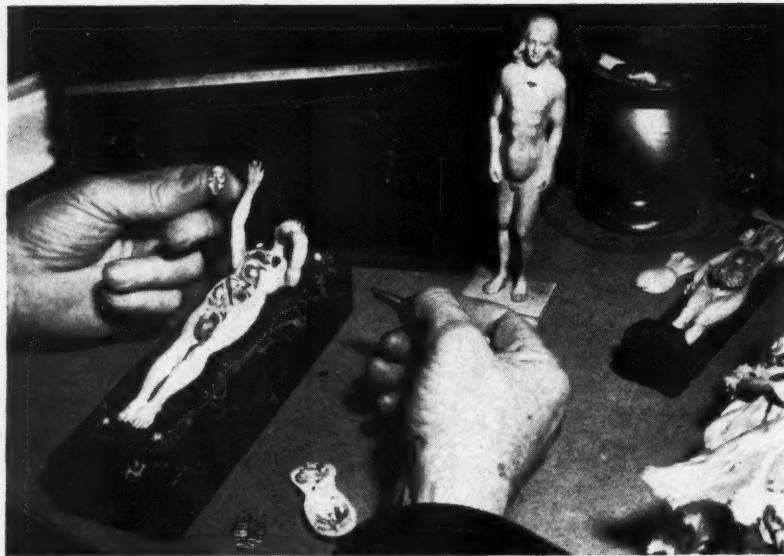
ments. Subsequently, when anatomists found the human anatomy different from Galen's descriptions, it was interpreted as meaning that man had changed since the time of Galen, thus invoking the first known theory of evolution without questioning the infallibility of this great man.

With the decadence of the Roman Empire, Galen's works and those of other Greek physicians were translated into Arabic. Arabs by the tenets of their religion were not permitted to desecrate the human body by dissection. In the process of translation the original text was paraphrased and garbled and, when in the 11th century the Benedictine monks retranslated the Arabic texts into Latin, further garbling of the Arabic text was inevitable—no two translations being the same.

In the 14th century an annual judicial and public dissection of a condemned criminal was permitted in Venice. About 1316 Raymund de Luzzi (Mondino) was the first to teach from a cadaver. His instruction consisted of four discourses coupled with dissections on the human body before the student body.

ABOVE: This unique manikin is described in detail on page 41. He is displayed before the title page of an early anatomical study published in 1639.

LEFT: The author.



If these dissections were inadequate and most perfunctory the trend was in the right direction, in spite of a blind leaning to the dicta of Galen, whose descriptions were read by the professor whilst a prosector did the actual dissection. The written word of Galen held precedence over the actual findings of the specimen immediately before the audience.

In the 16th century there lived a group of medical (philological) humanists who were dissatisfied with the medical texts which had been garbled in turn by the Arabic physicians and the Benedictine monks. The humanists restranslated the original Galen texts and others, and were impressed by the scientific method employed by Galen. As a result there followed the method of direct investigation.

A pupil of one of these men was Andreas Vesalius, an indefatigable dissector of the human body and now considered the father of human anatomy. His illustrations from actual human dissections were published in 1543 under the title *Fabrika Corporis Humani*.

With the advent of printing, wood block figures and real investigation on the cadaver, modern anatomy began. There were, however, two difficulties:

1. The anatomist was not likely to

ABOVE: One of the female manikins showing the chest and abdominal wall removed along with the abdominal viscera, the womb laid open and the fetus exhibited.

RIGHT: The portion of a print by B. Eustachius here visible indicates his method of anatomical illustration.

anatomist was not also somewhat of an artist.

Bartholomew Eustachius was both an artist and an anatomist. His volume of anatomical plates completed in 1563, although not published until 1714, is his handiwork alone. Not only did he prepare the illustrative dissections but he also made the copper engravings. The engravings are hard and stiff from an artistic point of view, but they are more accurate than the plates in the earlier Vesalius' *Fabrika Corporis Humani* which were prepared by van Calcar, a pupil of Titian.

The most beautiful and accurate anatomical plates ever produced were by an artist from specimens prepared by the Dutch anatomist, Govard Bidloo, and published in folio during the last quarter of the 17th century.

But even the finest examples of collaboration of artist and anatomist failed to represent the organs in their relationship to one another. Endeavouring to overcome this lack, the idea of constructing illustrations by a method of superimposed plates occurred independently to several different, widely-separated anatomists and teachers. These plates were designed to fold back like the leaves of a book, revealing successive occurrence of the various organs of the body.

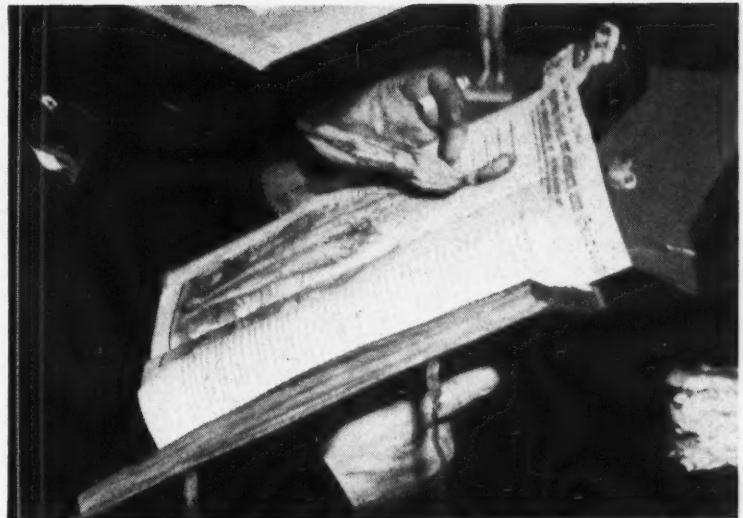
One of the earliest of these was produced in 1576 by Thurneysser. The best example was that designed



by J. Remmelen in 1607, who believed that the form was his own invention. It is to marvel at the ingenuity and patience of the artist when one examines these folding superimposed figured flaps. Hours must have been consumed in deciding how best to illustrate and construct these intricate anatomical charts.

But even this form of anatomical representation was not deemed satisfactory to some anatomists and surgeons. They resorted to plastic materials to illustrate contours and relationships in three-dimensional space. To overcome these difficulties, they constructed manikins or little men and women. The surviving manikins, carved most commonly in ivory and containing movable parts, are very rare.

Briefly, the manikin is a model of the human body, containing many of its parts which can be removed in demonstrating its anatomy or in practising certain manipulations, as in obstetrics. For the most part the figurines are carved in ivory, wood or marble, and are from 15 to 18 centimeters in length. As a rule the manikin is constructed so that one or both arms are movable at the shoulder joint about pegs. The chest and abdominal wall can be removed as one piece, revealing the various thoracic and abdominal viscera,



either cut out of the block or appearing therein as movable structures. The latter led to loss of the parts.

A common rule seems to have been established in the construction of the male and female manikins, for in most examples the female abdomen contains a pregnant uterus with a fetus in a "See No Evil" position; the male abdomen, on the other hand, usually encloses a large urinary bladder which is often winged.

Only one of the models pictured merits a special description, since it was constructed for purely artistic reasons. This will be obvious, for the organ systems are represented

allegorically. For example, the respiratory system is represented by two diminutive carved men pumping up a pair of bellows (the lungs). The circulatory system is indicated by a figure pounding an anvil with a sledge hammer (pulse). A vat containing fermenting grapes being squeezed by a seated figure symbolizes the gastro-intestinal system, the finished product of which is shown running into a sack held open by a small man (the G.I. tract). A cauldron enveloped in flame is used to describe the liver, long considered the hottest organ in the body. All parts in this manikin are sessile, since they are delicately carved from one piece of ivory.

Medical writing from the past contains many references to the use of these figurines in giving instruction on the physiology of pregnancy. One writer relates the story of a young bride (1865) who tells of receiving instruction with others on pregnancy from a lecturer using one of these female ivory manikins for illustration. Another teacher left a note to the effect that he had constructed the figurine so that his students could be better taught than those who commonly practised midwifery with evil effects because of their ignorance of anatomical parts. And on the other hand there is ample evidence that an artist often constructed a manikin for his own amusement, or for some wealthy and professionally interested person.

Condensed from the "Illinois Tech Engineer" with kind permission of the Author and the Publishers.



ABOVE: Like an intricate paper doll are the many-layered illustrations superimposed on one another to suggest body parts in this book designed by Leonard Thurneysser and published in 1576.

LEFT: Part of a plate from the set prepared by the Dutch anatomist, Govard Bidloo, compared with a manikin.

Food and Its Service

Sponsored by
the Canadian
Dietetic Association

ALTHOUGH only one block of Sunnybrook Hospital, accommodating one hundred and sixty patients, is in use at the present time, the next block of two hundred beds is about to be opened for patients. In this newest and most modern veterans' hospital everything possible has been done to make it not just a treatment centre but a place where the period of hospitalization will be as pleasant as possible. Food plays an important part in this all-over therapy, and no effort has been spared in planning the dietary department.

The main kitchen is a vast expanse of shining stainless steel and ivory tile. It has an excellent air-conditioning system, eliminating practically all food odours and giving a comfortably cool working area, and all ceilings are of sound resistant material. That

Lillian McAdam, B.H.Sc.,
Dietitian, Sunnybrook Hospital and
Evelyn Creed, B.H.Sc.,
District Dietitian,
Department of Veterans Affairs.

The Kitchens at Sunnybrook

is acoustic panel called "transite" made of asbestos with three inches of rock wool above it. The ceilings in the dining-rooms are acoustic tile, made of wood fibre board.

The main body of the kitchen is one hundred and sixteen feet by

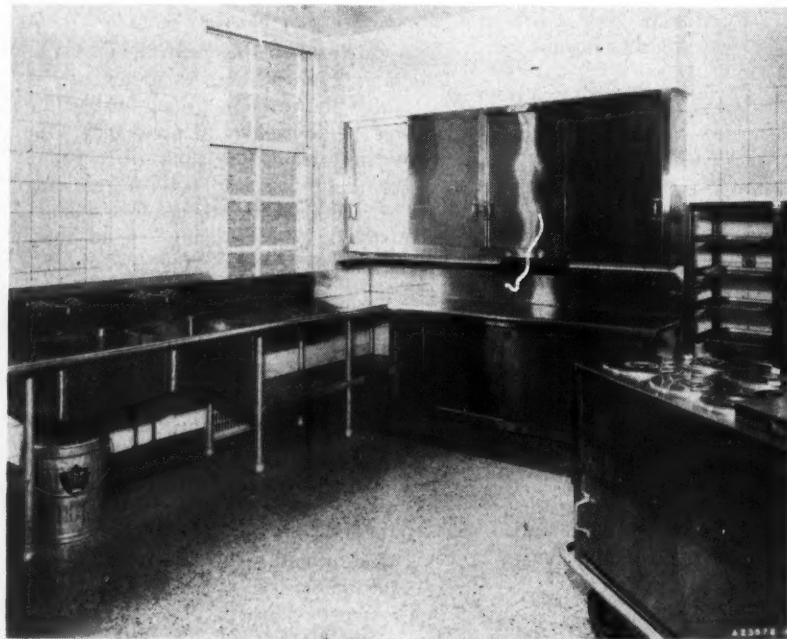
sixty-six feet, or seven thousand six hundred and fifty-six square feet. The central or cooking area is surrounded by the various preparation centres such as butcher shop, bake-shop and special diet kitchen. Each small units is situated as close as possible to the area of the main kitchen where the prepared food is cooked. Although the kitchen is on the basement floor there are windows along one side and the main body is covered by skylights.

All food is prepared and cooked in the main kitchen for distribution to the thirty-one serveries. The kitchen is planned to allow a flow of traffic from receiving through preparation and on to delivery of the cooked food.

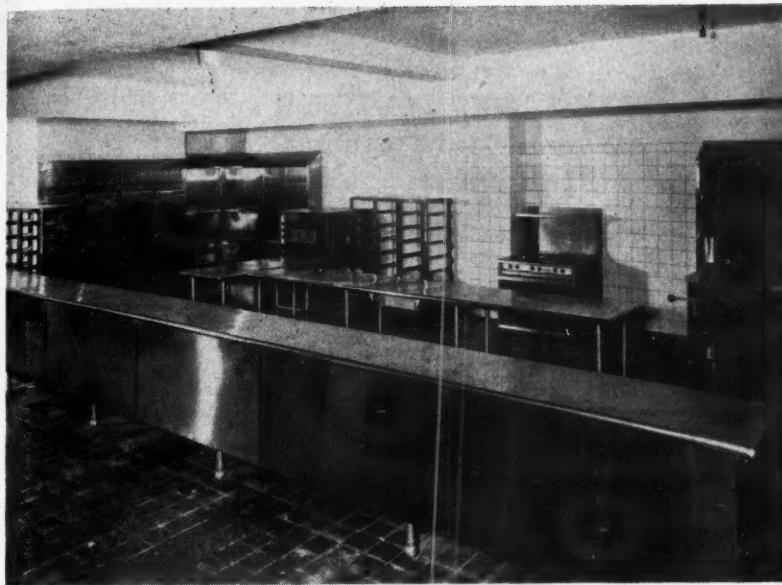
Preparation Rooms

An overhead trolley carries carcasses of meat from the delivery door to an inner low-temperature meat refrigerator where it is hung for about two weeks. As it is issued to the Dietary Department it is carried by the trolley to the butchers' walk-in refrigerator which adjoins the butcher shop, complete with triple sink, meat slicer and other necessary equipment. The butcher shop is adjacent to the roast ovens and grill.

There is a walk-in refrigerator for vegetables beside the vegetable preparation room and the separate salad pantry. The latter is complete with six reach-in refrigerators, low work tables, cupboards, sink and an electric food mixer equipped with an oil drip cup attachment for making salad dressings. The vegetable preparation room has a double sink, potato dicer and a modern potato-peeling machine, especially designed after experimental time and motion studies. It consists of a raised potato peeler from which the potatoes drop into a water tank flanked by three low work tables on each side, arranged so the left hand is always used to pick up



A typical servery



Special Diet Kitchen

the potatoes. These tables have wooden tops with a slot to allow refuse to drop into the stainless steel removable drawer below. The eyed potato is tossed into a stainless steel trough slanted over the tank and drops into a truck filled with baskets to fit the vegetable steamers. This truck contains water and may be wheeled to the steamers which are near the vegetable room.

Following around the outside of the kitchen, the next section is a walk-in refrigerator for butter and eggs, with an area outside for cutting butter and the bread room beside it. A walk-in refrigerator for milk has a quarry tile floor instead of the terrazzo flooring used in all other walk-in refrigerators because lactic acid affects the cement used as the basis of the latter type but has no reaction on quarry tile. In this area are two other walk-in refrigerators for fruit and fish. The latter is kept at twenty degrees and has a preparation room outside with a separate sink and reach-in refrigerator for the prepared fish.

The special diet kitchen is across one end of the main kitchen, and is a complete unit separated by a stainless steel counter, with sink, reach-in refrigerators, cupboards, electric mixer, bake oven, range top and scales.

The other end of the kitchen is

Pictures courtesy of General Steel Wares, Limited.

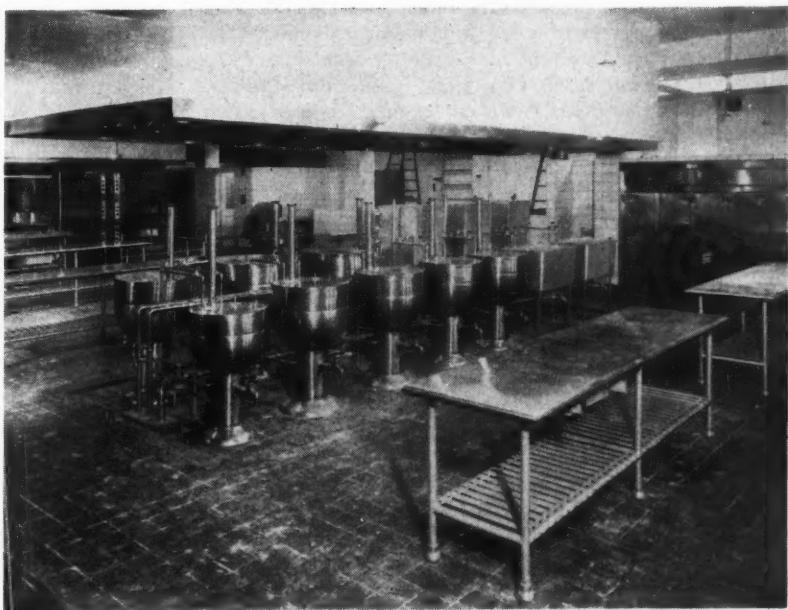
The pot-washing room fills the other corner at this end of the kitchen. It is equipped with three extra-large sinks, counters and pot racks.

The fourth side of the kitchen is an area for parking the thirty-eight electrically-heated food conveyors used to distribute the food to the various serving centres. A stainless steel counter separates this corridor from the rest of the kitchen and double doors open from it to the elevators.

Cooking Equipment

The central or cooking area of the kitchen has the newest type of equipment. Stainless steel has been used where at all practical, with rounded corners and a modern design to facilitate cleaning. All equipment is electric with the exception of one gas broiler, eight steam kettles, two steam roasters and three triple-tiered vegetable steamers. There are no ranges with low ovens. Range tops with storage space beneath and two three-deck roasting ovens are used. The two deep-fry kettles have a capacity of ninety pounds each. These kettles are side by side, one having a left-hand and the other a right-hand drain. There are also three fry-top ranges or griddles with storage space beneath.

(Concluded on page 88)



Battery of Steam Equipment

Obiter Dicta

Routine X-ray Chest Examination of all Patients—Today or Tomorrow?

A GREAT deal of consideration is being given by the public in general and by leaders in the fight against tuberculosis, in particular, to the necessity for routine x-ray chest films of all patients admitted to general hospitals. While great strides are being made in case finding all over the country by means of clinics and mass surveys, an obvious place to look for cases would seem to be among the people who are already ill for other reasons. This step is important not only from the point of view of case-finding but also as a protection to hospital employees.

The point needs no labouring in these columns. It has long been accepted and the time must come when every patient entering hospital will have at least a radiographic chest examination. Again and again we read in the press that the time has come and one recent editorial states that: "There is no valid excuse for delay in this matter".

Let us examine the problem from the point of view of the hospital at the present time. An important factor here is the question of time and personnel. The Council on Professional Practice of the American Hospital Association, in its excellent booklet *The Management of Tuberculosis in General Hospitals*, indicates that the system of reporting film readings should provide: a speedy report to the ward (i.e. within 24 hours); a summarizing report to the staff; a permanent record for analysis; a report to the patient or employee. This involves work which must be done promptly, every day. It will take time, according to the size of the hospital, not only on the part of the radiologist but also technicians, nurses and clerical staff. At the moment practically all of our hospitals are understaffed. Moreover a large percentage of hospitals are short of storage space for records of all kinds. The miniature film is tiny but a written interpretation must be filed. All this is asking one more service of institutions which are even now operating under grave difficulties in their effort to provide the best possible hospital care for those who are acutely ill.

However, let us assume that, if within the near future more employees and increased space should be available, this extra service could be included in the schedule of work in general hospitals. We then come

to the ever-vexing question of finance and actual mechanical facilities.

The popular press tells us every few days that photofluorographic pictures can be taken for 5c each, a negligible price. True the actual little bit of film used in the new miniature unit costs only a few cents, but this does not take into consideration capital cost, technical cost, overhead or interpretation. The reading of film is usually taken for granted because it is done by full-time employees of hospitals or welfare organizations but the American College of Radiology has set a fee of \$15.00 an hour or 15c each for the reading of survey films. This is considered by authorities to be quite reasonable and while it takes less than a minute to read one of these films this figure does give some idea of the value of the service. The reading, added to other overhead, makes it clear that the oft quoted nickel would not go very far.

As to capital cost, it is estimated that if a hospital now has the usual x-ray equipment and can use some of those facilities in conjunction with a new fluorographic machine the installation of such a unit would cost in the neighborhood of \$4,500 to \$5,000. If the institution is starting from scratch, the cost is apt to be around \$11,000 to \$12,000. It is accepted by authorities both in the United States and in this country that it would not be economical for a hospital smaller than, say, 100 beds to install such a machine because the turnover would not justify the initial cost. Therefore small hospitals must continue to use the large flat films which are individually more expensive.

One thing becomes obvious and that is, if all patients entering general hospitals were to be x-rayed on admission the total cost to the people of Canada would run into a good many thousands of dollars annually. But let us not be dismayed at the thought of thousands of dollars. We accepted calmly the expenditure of millions for a world war and after all this is just another fight—another imperative battle. Perhaps the average person will appreciate the cost better if we say that such an examination of each patient would mean the price of a show, less than the cost of a lipstick or a cocktail.

To make full use of all the potentialities of a hospital mass radiography program, it should extend beyond the confines of the hospital and be an integral part of the over all community tuberculosis control

program. A general realization of this fact will ensure the co-operation of official and voluntary health agencies who may be expected to assist in financing the cost of equipment and operation. In the province of Saskatchewan, the Anti-Tuberculosis League has offered to finance one-third of the initial cost of equipment, while the Government proposes to pay another third and, under the new health scheme, allow hospitals the exact cost of taking the films quite aside from the ordinary grants. In Alberta steps were taken as early as two years ago to experiment in this procedure, specified hospitals to be subsidized by the Government and the Tuberculosis Association of the province. We understand, however, that there has been difficulty in obtaining the equipment and the Royal Alexandra Hospital in Edmonton is still awaiting delivery of a fluorographic machine.

We are informed by the representative of one well-known manufacturer that the miniature machines will henceforth be obtainable about six months after the order is placed and that they are being turned out gradually in much the same manner as motor cars. In any case it is probable that a sufficient supply will be available by the time our hospitals are prepared to receive and handle the work involved in making a chest x-ray examination of all patients admitted.

In the meantime, let us by all means keep the public aware of this great need and take steps toward its accomplishment, but do not let us delude ourselves or the public with an unwarranted conception of its easiness or that old five cent chestnut. There are no pennies from Heaven and no major step in social progress is won without corresponding effort.—J. F.



Training of Medical Record Librarians

IN our March issue we published, under the heading *Correspondence*, a letter from Dr. L. J. Crozier, superintendent of Victoria Hospital in London, Ontario, in which he pointed out the scarcity in Canada of those most essential hospital employees—qualified medical record librarians. He drew to our attention again the fact that so few of these workers are being trained in Canada and suggested that if our Universities could give courses for record librarians an adequate supply might eventually be available to hospitals. In this way the record departments in our hospitals might be vastly improved. This is a very constructive suggestion and one which should be borne in mind and urged by all those who are in a position to have influence in university circles.

An immediate step which can be taken is the holding of refresher courses or institutes for record librarians now engaged in hospital work. Such courses have been given, during the past two years, in various centres across the United States under the auspices of the American Hospital Association and the American Association of Medical Record Librarians. The instruction given emphasises the use of the Standard Nomenclature of Diseases and is thus of great value to the individual record librarian and to the hospital. A number of Canadians have attended these courses in the U.S.A. and we understand that at the present time our own Canadian Association of Medical Record Librarians is considering possible plans for such an institute to be held in this country.

Meanwhile Dr. H. V. Hullerman, Assistant Director of the Council on Professional Practice of the American Hospital Association, has offered the facilities of their organization for the holding of an institute in Canada during the Fall of the current year. This friendly and helpful gesture is deeply appreciated by the Canadian Society of Medical Record Librarians and it will be discussed at a meeting of their Executive at an early date. We feel sure that librarians in this country would be very grateful for the opportunity to attend such an institute in the near future. Whether it can be arranged through our own resources or whether our Association accepts the proffered assistance from our neighbors to the South, the movement deserves and requires the support of all librarians and all hospitals if it is to be a success. The time to take action is now.—J. F.



National Hospital Day

ONCE again, on May 12th, Canada and the United States will celebrate "National Hospital Day". The extent to which each community participates will be up to the individual hospital. If it has built up community goodwill over the years, if it has a live public relations program, if it has the support of the various publicity media in its area—then May 12th will really mean something to it and to the people it has served.

It is not for us to suggest specific ways of marking the day. Some hospitals hold "open house". Some schedule special demonstrations and exhibits for visitors. One hospital in western Canada hit on the happy idea of a "baby party" for all the babies born within the hospital during that year. What is important for success of any program is that everyone participate—hospital staff, patients, former patients and citizens at large. It may be that this is easier in the small city or town, where everyone knows the hospital and what it has done. But great metropolitan centres can be made "hospital conscious", too, as past records have shown.

Surely there is no hospital today which does not realize the value of happy relations with its community. To put the matter on a low (but very vital) plane, an informed

The Case for

GROUP PRACTICE

EXPERIENCE is one of the intangible but most valuable assets one acquires throughout life, yet this asset is to a large degree dissipated with the demise of the individual. Consequently, succeeding generations make the same errors. This is poor economy. We should, in some way, learn more from the experience of others.

The opinions on group practice expressed here are the result of the experience of four years' not-unsuccessful private practice, and almost twenty-five years of group practice. During the quarter century that our group has functioned we have grown considerably. We have experienced many minor changes and three major reorganizations. The unity of purpose of our personnel is stronger today than at any time in our history.

The type of business organization set up by a group is of secondary importance and should fit the peculiar requirements of that group. The most important point in the success of a group is a clear understanding of its primary objective.

If two or more men propose forming a partnership, their primary reason for so doing must be sufficiently strong to overshadow personal ego and selfishness. Otherwise, discord, and all that comes in its wake, will occur. As staff increases are considered, the primary requisite of each candidate must be that he have the same ideology and motivation as the group itself. The larger the group, the more regulations and controls are necessary, yet management must contrive to stimulate and not

**Ambrose G. McGhie, M.D.,
McGregor Clinic, Hamilton, Ont.**

hamper the initiative of its staff members.

The primary objective in forming a group in most cases may be personal gain. If this is interpreted to mean more cash available quickly, I believe disappointment will result. If it means more economic security and better working conditions, then the objective may be realized. Physicians and surgeons experience either too much or too little leisure time—too much at a time of life when they are most anxious to be busy, and too little when they are at the height of their skill and reputation. A well-organized group should be able to aid the young man to get on with the job, and provide more leisure for its senior members.

If the group will add improved medical service to its primary objective, then its reason for existing is more than doubled, and its success much surer. The motive is further divorced from personal advantage. It is raised to the level of a public service. If one more step is taken, namely, the undertaking of training of professional and technical personnel, both in the skills of their particular fields and the ideology that motivates the whole group—then the personal element becomes so submerged that the risk of small differences of opinion causing havoc is almost eliminated.

Laboratory procedures and the multiplicity of gadgets now in use are expensive. They can be put to the best use with the least expense to the public where they are available to a group. All such procedures are ancillary services and should be used

subsequent to a careful history and physical examination. This eliminates the possibility of their becoming a public menace, rather than filling the role for which they are intended.

Nowhere does experience make itself felt more, than in the practice of medicine and surgery. Experience develops judgment. Since medicine is not an exact science, good judgment is essential. A group of consultants, operating under a plan which provides for free consultation among the various specialists, affords a most excellent environment in which to train young men. They acquire through practice the habit of a definite procedure in investigating a patient, both in the method of history taking and in physical examination. Once this habit is established, there is little danger of reverting to incomplete and inadequate investigation. The close association of the student, in his day-to-day work, with his experienced chief is invaluable. In the clinic the young man sees, in great numbers, the ambulatory patients who make up the larger portion of any practice. In hospital practice comparatively few of these patients are studied. Diagnosis should be made before hospital admission is necessary.

The attitude of the profession at large to group practice is interesting. I have never discussed group practice with any physician who practised in an area where there was no group, who did not concede that group practice was the ideal way of life. Conversely, in any locality in which a group is organized there is always criticism of the group by some of the physicians and surgeons in that community. Some criticisms are just, and some are unjust. It is of interest that frequently the more severe and persistent critics are those who actually are the least informed about the group, its motives and its work. They are just against the idea, and, fair or otherwise, raise their voices wherever possible.

Groups in general practice are strong competitors of their individual neighbours, and so arouse their displeasure. Groups doing both general practice and specialties are in serious competition with both the family doctor and the specialist in that district. Groups of specialists have

(Concluded on page 92)

An address given at the Lake Mazinaw Conference on Medical Economics, October, 1946.

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Employer—Employee

Relationships

EMPLOYER-EMPLOYEE relations are only a part of human relations. What one does about them depends, as in all cases of human relations, upon one's philosophy. Some administrators assume the attitude of circumvention of any possible union activities without further attention to employees and their problems. Far more, however, have agreed with the philosophy which has developed among personnel directors in industry—that the whole secret of success in personnel relations is the prosecution of the "Golden Rule"—in other words, to do unto the workers as you would have them do unto you.

This philosophy of personnel management has prospered because it has proved its value. It has been proven in industry that success is dependent upon the success of the individual worker. As workers have found satisfaction in their jobs, they have worked harder, built up the business further and profited again. An outstanding example cited to show the advantage of development of individual initiative within any organization is that of the Lincoln Electric Company of Cleveland, which faced a congressional investigation on the basis that the bonuses paid to workers and the trust fund established to retire extra wartime workers had cost the government over four million dollars in tax funds which should not have been paid. Mr. Lincoln was able to show that his incentive pay scheme developed shortcuts which saved the government from paying \$35,000,000 more than it did for the products it bought from his company. The

**Nellie Gorgas, Ph.B., M.A.,
Administrator, St. Barnabas Hospital,
Minneapolis, Minn.**

\$4,000,000 extra cost seems small when compared to the saving experienced.

Workers are People

In hospitals in the United States, salaries cover approximately sixty per cent of the total costs of operation and that cost is going for *people*—not things. People are far different from things. They are becoming more and more articulate and protesting more and more if they are not satisfied with their employment niches. The administrator likewise is becoming more and more aware that if he is to accomplish his objective—which is, after all, the getting of a certain job done by his employees—he must pay more and more attention to their needs and desires. This does not imply that personnel management is predicated upon the development of social events, but that it does depend upon somewhat the same philosophy as the old corn-husking parties where the community as a whole realized that it was not a one-man affair to take care of the harvesting and that everyone had to put his shoulder to the wheel and get the job done the quickest, most effective way. They saw the job as a whole rather than over-emphasizing their own small tasks.

The following excerpt from a furniture dealers' news letter has this to say: "The finest satisfaction of all comes from being a *needed* and *wanted* part of something bigger than just ourselves. The church knows this secret. Lodges and fraternal organizations exist on it. Labour and political leaders thrive on it. But

business seems to have forgotten it. Almost alone among the great forces of modern society, business persists in thinking its concern lies only in the technique of making and distributing goods. How wise was one employer who took down a sign saying 'Employees Entrance' and had painted, 'Through these doors pass the most highly skilled workers in the world'."

The hospital differs from the industrial field, but many of the practices in each can be identical. The differences which should be kept in mind in all our employer-employee relationships in the hospital as compared to other industries are (1) the educational responsibilities for medical students, nurses, technicians and other employees; (2) the life and death responsibilities of the staff; (3) the continuous twenty-four hours a day, seven days a week, week in, week out demand for service; (4) the truly personal service involved which should rule out the acceptance of mechanically efficient but personally unfit employees; and (5) the responsibility for the use of public funds. Because of these essential differences some of the policies in use in other business are not acceptable in hospitals; but it is surprising to note how few adjustments are really necessary.

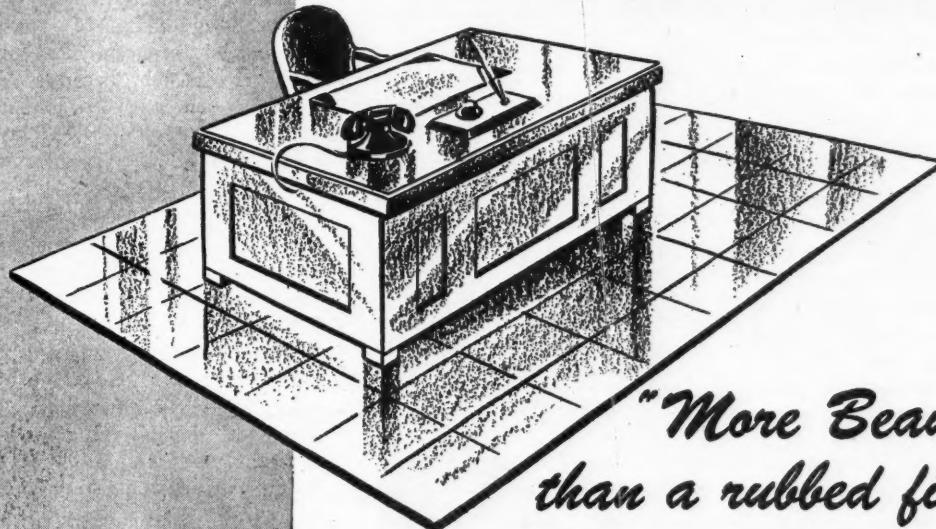
Ideal Employer-Employee Relations

Those relations which will accomplish the hospital's objectives in the most effective manner possible are the ideal toward which to strive. Someone has pointed out that perhaps if one can deal with employees as friends, one by one, he can avoid dealing with them later as groups through strangers. Fred Harbison, head of the Industrial Relations Centre at the University of Chicago states that, as far as group action is concerned, there are certain areas where the philosophy of the community is such that unionization is a "natural"; all the workers' friends and relations are unionized in their organizations, and there is no use becoming "emotional" and "developing ulcers for ourselves". Mr. Harbison advises that one make certain that the representatives with whom one deals really represent the majority, that the workers are given the opportunity of voting on whether they want union or not, and that the

Delivered at the First Institute for Hospital Administrators, Winnipeg, October, 30, 1946.

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administrator start immediately to find out just what the grievances or issues are. Negotiations are usually long, tedious and exhausting; there are always some controversial points, or ones which can be made controversial and it is best to have someone conversant with negotiation procedure to handle the matter because the unions are bringing in experts on their side.

Negotiations are a Matter of Bargaining

It should always be remembered that negotiations are a matter of bargaining, trading off one concession for another, and the best bargainer gains the most. Mr. Harbisson says that it is generally an indication of poor personnel policies if unionization appears. It would seem desirable to act on the premise that unionization may be avoided if a good job of personnel management is done. Then, if unionization comes, it will be more easily handled if a good program is in effect. Trouble usually comes from what the Industrial Relations head terms poor "grievance drainage".

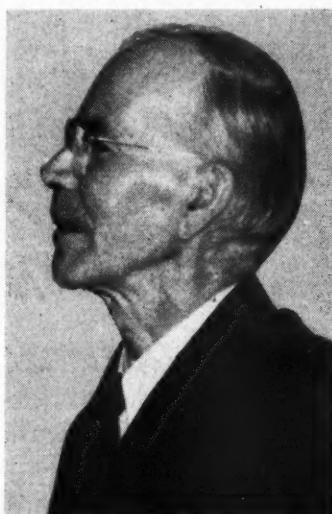
It is important that hospital administrators become as well acquainted as possible with the tools and techniques available to them. Chief factor in the human relation problem is that there should be a feeling of fairness on the part of both the employer and the employee. The administrator must be imbued with the feeling that the worker will do his best *if he is satisfied with his job*, and the worker must be convinced that the administrator is doing the best he can for him but that there are certain limitations inherent in the hospital situation. The hospital has an almost insurmountable barrier to satisfaction for workers in that it has to cover a twenty-four hour service; patients will not co-operate and be sick only eight hours a day, to say nothing of a thirty-hour week! Then, income is limited by the patients' ability to pay and by limited endowments and gifts or tax funds to support deficits. The administrator must be sure that employees, individually and collectively, are aware of these factors; but it must in all fairness be admitted that in a few cases in the past these facts have been exploited and the worker has had to bear more than his fair share of the burden

of providing the charitable services the hospital has provided.

Job Satisfaction Important

The selection of the worker is important. He must be satisfied with the type of work available within the hospital. There are few really efficient tests devised which will prove whether the worker has the proper aptitudes for many of the jobs offered. Clerical work has become so standardized that typing, manual dexterity and certain intelligence tests are used successfully. For nurses there are aptitude tests, too,

Mr. Brady to Retire



One of the best friends Canadian hospitals have in Government circles, Mr. James C. Brady, will retire from his position as chief of the Institutional Statistics Branch of the Dominion Bureau of Statistics at the end of this year.

Mr. Brady has been a tireless worker in the cause of hospitals. Under his aegis the collecting and tabulating of hospital statistics has been raised to its present high degree of accuracy and thoroughness. His pet "project"—a uniform method of hospital accounting — has been brought to a successful completion.

Those of us who have benefited by his wisdom and advice and come within the range of his all-embracing smile will be pleased to know that he will be present at the coming Canadian Hospital Council meeting at Winnipeg in October.

and for our professional staffs there are fixed criteria—but for the non-professional employee there is still not sufficient material to be recommended universally.

Job analysis and job specifications are essential. If an organization is relatively small, an administrator has a pretty good insight into the job he is trying to fill, but as the institution grows larger and work has to be sub-divided and distributed among more people, one is not always certain what the job is unless an analysis is made. An analysis and specifications chart of personnel management kept on file for use whenever a job becomes empty shows the content of the job and the working conditions involved; and the specifications show the characteristics, training, experience and education needed for success in the job.

Selection of personnel is so important that it is considered wisest, wherever possible, to concentrate it in the hands of experts. As institutions grow larger, employment departments have been organized in order to relieve department heads from the details of interviewing applicants for the job to be filled. References are a nuisance to follow up and all the little details of orientation are so time-consuming that a central employment office can be of great assistance. It is wise, however, to leave the matter of final selection of the employee to the department head. For this purpose the employment office may select three or four likely candidates whose references have been checked and who have been given available aptitude tests and then allow the department head to make the final choice. After all, if the department head is to be responsible for the worker afterward it is quite natural that he should want a part in the selection.

The Training Program

The objectives of the training program are to increase the amount of work as rapidly as possible by not wasting time while the worker feels his way along until he becomes familiar with his job; to improve the quality of the work; to reduce turnover of employees who become befuddled and inefficient because of the lack of knowledge of their jobs; and to improve their morale by giv-

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READILY-INJECTABLE. The new Squibb Penicillin in Oil and Wax can be readily injected through 20-gauge needles without preheating when at room temperature.

DOUBLE-PURPOSE CARTRIDGES. One 1 cc. cell contains Squibb Penicillin in Oil

and Wax, 300,000 units; second cell contains sterile Aspirating Test Solution, permitting aspiration to check proper location of needle before penicillin administration.

METAL CARTRIDGE SYRINGES. The new B-D* Cartridge Syringes are designed for repeated use with readily changeable cartridges and needles. *T.M. Reg. Becton, Dickinson & Co.

1. Kirby, W. M. M.; Leifer, W.; Martin, S. P.; Rammelkamp, C. H., and Kinsman, J. M.: J.A.M.A. 129:940 (Dec. 1) 1945. 2. Romansky, M. J., and Rittman, G. E.: Science 100:196 (Sept. 1) 1944.

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ing them a better feeling of security because they have a good knowledge of what they should do. Repetition is such an important part in the training program that it is well to have in mind the story of the negro preacher who points out that, when he wants to get something across to his parishioners, he says: "First I tells dem what I'se gwine to tell dem, then I tells dem, then I tells dem what I done tol' dem." *Tell and show and then tell and show, and be sure he understands* is the whole theory in training.

Introduction to the New Job

A Manual of Instruction in which are set the rules and regulations regarding working conditions within the hospital is much in demand. It is time-consuming and sometimes expensive but it is worth the effort if only to save endless explanations and arguments. The worker wants to know his rights and his privileges as well as his duties and obligations. Making an employee feel he is a welcome new member of the group is a little thing, but important. Introduce him widely and well. The working conditions must be such as to make a worker want to stay at the hospital and do his best. Supervision and control that is fair is all-essential. No favouritism or discrimination should exist and this is difficult to eliminate at times; but the administrator must have his ear to the ground and know if unfairness is existing. Supervisors should be taught the technique of the "criticism sandwich" and should sweeten their fault-finding by commendations. Qualified people, plus definite lines of responsibility and a chance to develop themselves, make for a good program. *Incentives and morale building are important.* Interviews with workers who are being discharged will give an insight into how well the department heads are doing their job of following up on their employees and adjusting misfits.

Wages are Not All

The salary should be equal to the going wage in the community, but

Prairie Provinces to Hold Institute on Administration

Arrangements are being made for an Institute on Administration to be held in Edmonton, Alberta, during the week of October 20th, under the auspices of the Associated Hospitals of Alberta with the assistance and co-operation of the associations in British Columbia, Saskatchewan and Manitoba. Dr. Angus C. McGugan, administrator of the University Hospital, Edmonton, is chairman of the committees in charge of arrangements, and the directors are Malcolm T. MacEachern, M.D., C.M., and G. Harvey Agnew, M.D.

relativity is much more important than the absolute salary. A systematic promotion and understudy program is important. Seniority or ability as the basis for promotion is a very controversial point and becomes more so as unionization develops. Unions are great levellers—the theory so often seems to be that all are doing the same job and so should all be on the same basis, and the only difference should be recognition of long service by using seniority only as the basis for promotion. This is difficult to accept, especially in the hospital where it seems so essential that one has the best worker for each job. That is a problem which comes to the surface whenever a union arises. If a good job of personnel relations is to be accomplished, reliable and fair evaluation of performance and abilities is needed. Although this evaluation is a time-consuming job it is an effective weapon when the union representative or any fellow worker comes in complaining of discrimination. It is well to have proof over a fairly long period of the quality of work and of interviews which have been held with the worker to try to show him the error of his ways.

Employment Security

The question of security is an important part of the working conditions connected with a job—social security; retiring allowances (all too infrequently provided by hospitals); workmen's compensation; and health insurance or medical care, which is

covered either as a gratuity or by a Blue Cross or group plan of some kind. Usually, free medical care is provided but there is a wide range in the provision of hospitalization for employees.

Grievance procedure, or the "grievance drainage" mentioned before, is an important factor in the relationship program. The employee wants, probably more than anything else, a chance to air his grievances. Be a good listener and let him get it off his mind. He will feel the better for talking and will not go away frustrated in his feeling that it is of no use to try to get a chance to talk things over. The worker should be on such relations with his department head that they can straighten out difficulties promptly or that the head can intercede for the worker with the administrator.

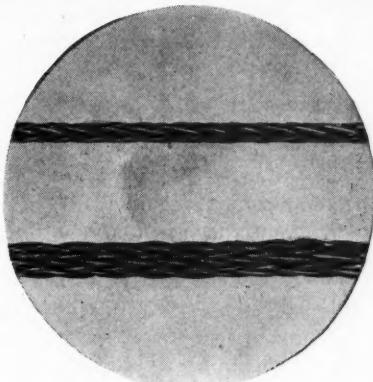
While the workers naturally want higher wages, they know the social implications of higher wages in hospitals and have, in most cases, been fair about the matter. While their salaries have often been far too low, this is not the greatest cause of discontent today. Long hours, weekends, split-shifts, too few total workers to cover needs, and unpredictable hours are almost inherent in hospitals today and they are proving detrimental in competing for the workers now available. Extra pay for the more inconvenient shifts, extra vacations, and tolerance in fitting programs to individual needs would help hospitals to some extent.

(Concluded on page 86)

Make National Hospital Day a Community Day

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Many individual strands of wire are in Ethicon Braided Tantalum. Photomicrograph, above, shows Sizes 3-0 and 1, magnified to x15.

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Sutures. Monofilament: Sizes 6-0, 5-0, 4-0. Swaged to Eyeless Atraloc needles. **Braided:** As described at right.

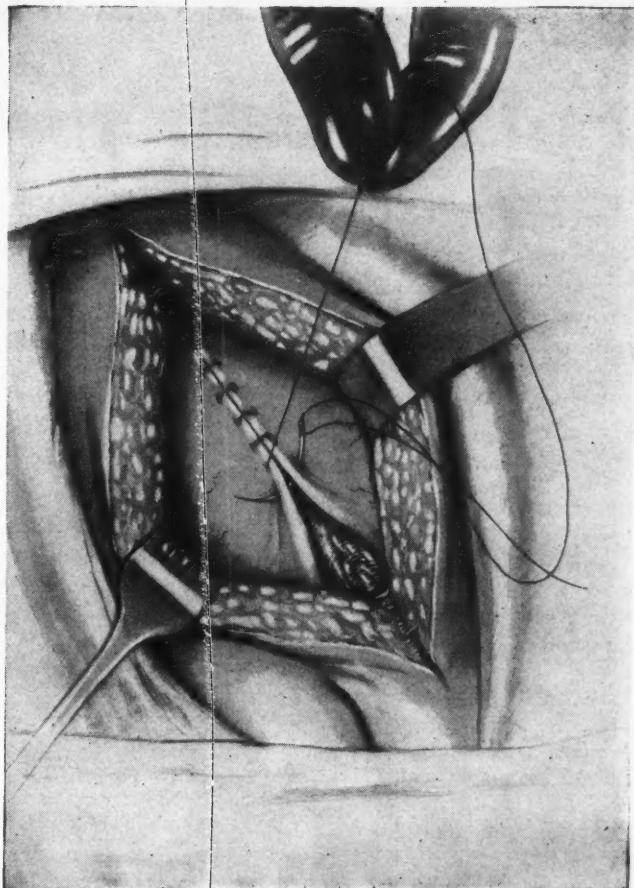
Wire. Suturing material on spools. Sizes 6-0, 5-0, 4-0, 000, 0, 2, 4.

Ribbon. For making neurosurgical hemostasis clips. Clips also supplied ready-made.

Sheet. For skull plates in crano-plasty and general plastic surgery.

Foil. Used in neuro- and orthopedic surgery for protection of nerves and tendons.

Literature describing use of Ethicon Tantalum products available on request.



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With the Hospitals in Britain

By "LONDONER"



C. E. A. Bedwell

Dear Mr. Editor:

A sentence in one of your *Obiter Dicta* in the December issue strikes a responsive chord in the mind of the English reader. It runs: "The greatest hospital need across Canada today is for more accommodation for the chronically ill patient." The subject is one to which a good deal of attention is being given in this country, as part of the larger problem of the welfare of the old people in the community. The fact of the matter is that all the people of the Commonwealth and Empire are faced with it to a greater or less degree. The white population is barely replacing itself, so that the percentage of old people is steadily increasing and tends to have a developing effect upon the total available manpower of the country. It is along these lines that a committee appointed by the Nuffield Foundation have just published an illuminating report on the problems of ageing and the care of old people. "The committee have been impressed by the views expressed to them of the high therapeutic value of occupation and employment in delaying the development of the effects of ageing, and they feel that it is in the interests of those who are elderly but not old to be able to continue in employment as long as they wish to do so." Some attention was given to this point in the new National Insurance Act but the Committee think that the Government should watch its operation with a view to extending the inducement to continue work. The years of war showed how much many of these old people enjoyed the opportunity to continue regular activities. The fact of the matter is that popular ignorance is condemning many of these old people to lives of idleness

leading to deteriorated health and by degrees requiring them to spend more time in bed until to some extent they become bed-ridden and labeled under the horrid description "chronic sick".

Before Canada embarks upon any extensive campaign for the hospitalization of the so-called "chronic sick" it would be well to take warning from conditions in this country. There are many institutions where people lie in bed year after year without proper examination or treatment. *The Lancet* quotes as an ex-

segregated from the general patients and assigned to an institution with a generally lower standard. Many of the buildings used for this purpose are out of date and belong to an era with an entirely different conception from that prevailing at the present time.

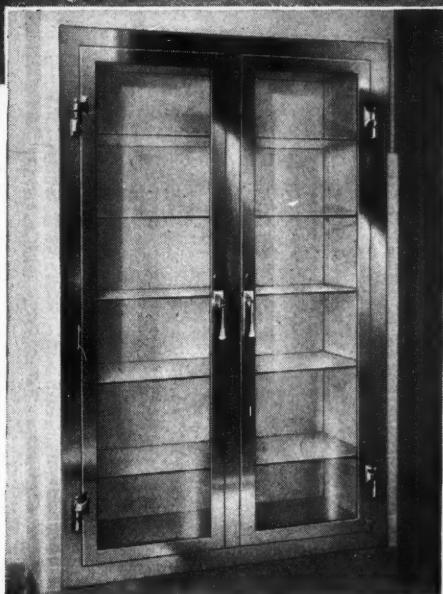
The first step, therefore, before any man or woman can be regarded as not being able to live as a normally active member of the community, is to be quite sure of the diagnosis. If the lot of the old people in Canada is anything like it is in this country, it may safely be assumed that a diagnostic survey will reduce the requirements for bed accommodation by something like fifty per cent. Even then, before launching forth upon any building program, there is another consideration to be taken into account. The Nuffield Committee found that there are two schools of thought. One "believes that the patient should be removed to and cared for in a special long-term sick unit in close touch with a general hospital, of which it would for practical purposes form a part. According to the other view the patient would, in suitable cases where no further specific medical treatment is considered advisable, be removed to an ordinary Home under a good Matron; in this way the patient would enjoy as near an approach to ordinary living as possible and would learn not to regard the hospital as the centre of his or her future life." Apart from my personal preference for the latter choice, I venture to suggest that it is more suitable for conditions in Canada, owing to the possibility of entrusting much of the work to religious communities. On the other hand, care must be taken so that these old people are not under the charge of staff who have themselves reached the end of their day's work.

In discussing this aspect of the
(Concluded on page 86)

Are They Really "Chronics"?

ample of what can be done for such patients a survey made at the West Middlesex Hospital "where 60 per cent of the patients who come into the chronic sick wards are discharged well enough to return either to their own homes or to homes taking healthy old people". *The Lancet* observes: "Certainly very large numbers (note the phrase) of old people now in infirmary beds might be leading active and happy lives at home if thoroughly treated." Quite often the required treatment is psychological rather than medical. They just need an interest in life.

Much of the situation in this country is due to the attitude of the teaching hospitals, though there are signs of a change. Because these old people do not present any features of particular interest they have been passed on to the hospitals of the local authorities under the condemnation of being 'chronic' patients. If the municipal hospital has a system of grading, then these old people are



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APRIL, 1947

Blue Cross News

The Purpose of Voluntary Hospitals

The purpose of voluntary hospitals, of course, is not to balance a budget but to make available an increasingly high standard of hospital care—buttressed with reasonable assurance that the individual hospital will not suffer financial loss. The humanitarian spirit must always remain the motivating force in hospital thinking. A great opportunity lies before us to plan and develop a program for hospital and medical care to satisfy fully the needs of the American people. This can be done through our voluntary hospitals in co-operation with Blue Cross Plans if all hew to the basic purpose for which the plans were organized. Either we do this, or we pass the load to a compulsory, centrally controlled system. If we are determined to go down the road that leads to complete governmental control, we must, out of logic and honesty, cease frightening hospitals, doctors, and public, with the spectre of bureaucracy. We must preach what we practise.

Abraham Oseroff, author of "Hospitals and Blue Cross Plans Must Choose".

* * * *

"Blue Print" For Plans

"Blue Print" is the title of a new national quarterly health digest now being published by the Blue Cross Commission of the American Hospital Association, co-ordinating agency for the 89 Blue Cross hospital service plans in the United States, Puerto Rico and Canada. A copy of "Blue Print" has just come to our desk. The symbolical Greek Cross in blue against a white background on the cover is a striking and most attractive one, and congratulations are in order to the Editorial Board for the timely interest of health articles as well as the information and comments on Blue Cross activities. This publication is available free upon request to the Blue Cross Commission, 18 East Division Street, Chicago 10, Illinois.

Big Expansion of Blue Cross in Quebec

In a period of 18 months ending December 31st, 1946, the Quebec Hospital Service Association increased its enrolment by 122 per cent and is now protecting 267,544 persons.

During 1946 an enrolment record was established by this plan, 122,323 new members being added. This represents a percentage increase of 78.8 as compared with an over-all increase of 29.4 per cent by Blue Cross plans in Canada and the United States. The Quebec plan held 14th position in net enrolment gain for 1946 and is in 26th place in size among the 87 Blue Cross plans.

The annual report showed subscriptions earned \$2,063,317. Hospital expenses amounted to \$1,585,817 and operating expenses \$327,799. A breakdown of the figures revealed that 83.4 per cent of the revenue went to subscriber benefits. The total number of claims paid by the Association since its inception stands at 44,876 covering 384,069 days.

The Association has rapidly extended the scope of its services and is now in a position to offer comprehensive protection against the cost of hospital, surgical and medical expenses.

* * * *

Manitoba Blue Cross Reports Successful Year

The eighth annual report of the Manitoba Hospital Service Association indicates that membership is increasing steadily in that province. There are now 91,049 contracts with a total of 227,479 participants. This represents a net increase in 1946 of 11,439 contracts and 32,426 participants.

During the year the Association covered the hospital accounts of 29,216 patients at a cost of \$1,008,375.65 in hospitals in every province of Canada and many of the states in the U.S.A.

The heavy demand for hospital care together with increased hospital

charges resulted in a deficit for the year of the sum of \$35,303.01 and this sum has been charged to the reserve. However it is confidently expected that new rates which were introduced in October will correct this trend.

To inform subscribers of the reason for the increased rates a Sunday afternoon broadcast known as the "Blue Cross Hour" has been conducted through station CJOB since October and has assisted in creating a wide-spread acceptance of the new terms. At the same time a low-cost service was offered as well as the standard semi-private ward contract and this has proved to be very acceptable to those in the low-income bracket.

Progress has also been made in selling contracts for medical service in Manitoba. At the end of the year there were 16,185 contracts covering 35,789 participants, an increase for the year of 4,632 contracts and 10,447 participants.

* * * *

Retirement Annuity for Manitoba Plan Employees

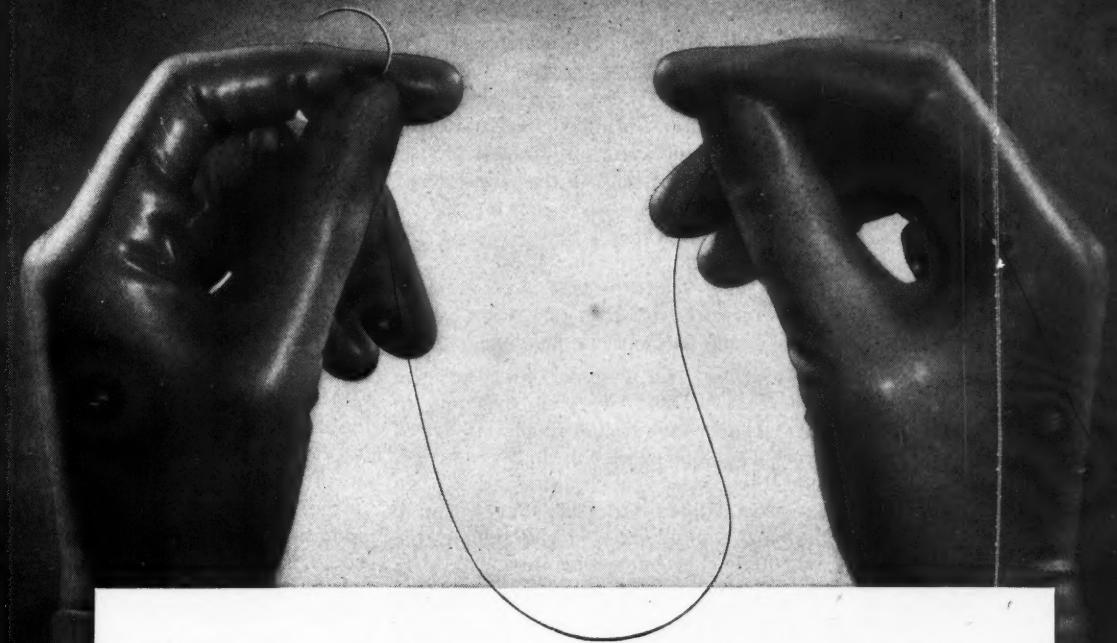
An important step was taken by the Board of Trustees of the Manitoba Hospital Service Association during the past year when a retirement annuity plan was established for employees of the Association. This is a contributory plan administered by a Board consisting of three Trustees and two employees. The arrangement has given great satisfaction to the members of the staff.

* * * *

Upon request to Associated Hospital Service, New York City, and United Medical Service, its affiliate, members of the Federation of the Handicapped, Inc., were able to secure Blue Cross hospitalization with surgical benefits. Maximilian P. Brandeis, general manager, terms the extended benefits, "another great step taken by the handicapped on their way to becoming fully responsible and self-sufficient members of their respective communities".

* * * *

Eighteen states and two Canadian provinces now have more than twenty per cent of their population protected by Blue Cross.



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D & G Sutures

"This One Thing We Do"

Here and There

Printing of the B.M.J.

During two world wars with their inevitable disruption of so many civilian activities, the British Medical Journal was issued with its usual promptitude because it was considered indispensable to the national effort. On May 10th, 1941, the Journal printing plant was destroyed by German bombs but production of the weekly issues continued uninterrupted.

However, during the past winter a national emergency of a very different type cased a temporary break in this fine printing record. The unprecedented fall of snow in England and the resultant tie-up in transportation facilities, together with the shortage of fuel partly caused by labour difficulties, wrought untold hardship throughout the country. Electric power was of necessity closely rationed. This point was brought home to us in a letter from our English correspondent, Mr. Bedwell, when he wrote: "I went into a tea shop this afternoon about 3.45 p.m. There were thirteen tables, nearly all of them accommodating four people. Five of the tables had *one* candle each. Teas were being served by the staff in the darkness. It was so dark that I could only tell a chocolate eclair from a piece of cake by its size".

Thus it was that during the second week of February the printers for the B.M.J. found that they had no electricity with which to turn over their machines. After several days of suspense, the Ministry of Fuel and Power gave permission (and power) to publish the issue of February 15th. At the same time the Editor was warned that it would probably be impossible to print the next two issues and it turned out just that way. Nevertheless the British Medical Association did not give up. An issue of February 22nd duly appeared in the form of one sheet of foolscap stencilled on either

side. We quote the first paragraph:

BY CANDLE-LIGHT. This, the smallest B.M.J. since 1840, has been "printed" on hand-operated duplicators in B.M.A. House, by permission of the Ministry of Fuel and Power and the C.O.I. Our "printer" this week is the Secretary of the B.M.A. News and Views in this issue are evaporated to dryness. Abbreviation will, we hope, be unambiguous.

One can readily picture the B.M.A. staff working overtime in inadequately heated rooms (if heated at all that week) in an effort to get this leaflet out on time and we can sympathize with the state of mind or atmosphere which produced the following interesting item.

COAL AND MEDICINE. Shivering, we tend to think of coal only as a fuel. Coal is medicine as well. In 1834, Runge discovered carbolic acid, a coal-tar product. With carbolic Lister stoked the fires of surgery for posterity. Perkin's discovery of the aniline dye mauve in 1856 was the starting point of modern medicine. Weigert in 1871 stained bacteria with the aniline dyes of coal-tar and Koch soon followed suit. Ehrlich hit upon the idea that certain cells had chemical affinity for certain dyes. This led to differential staining of tissues and the birth of chemotherapy. The red dye-stuff protosil, patented in 1932, began a revolution in medical treatment—with the sulpha drugs. The malarial remedies meprazine and paludrine depend for synthesis on coal-tar distillates. From naphthalene comes the synthetic analogue of vitamin K. Phenol is the chemical parent of a common purgative, of aspirin, and of the synthetic oestrogen stilboestrol. Coal gives doctors their most potent remedies and research workers essential chemical instruments. And if nylon which comes

from coal is wanted by colliers' wives for stockings, the surgeon also wants it for his sutures.

* * * * * Push-Buttonitis

An intriguing picture of house-work, or lack of it, in the future was presented to the Royal Canadian Institute in Toronto by Mr. Charles A. Scarlett of the Westinghouse Corporation. Looking ahead a few years he foresaw many changes. Washday would no longer be "Blue Monday"; the washing might be done on Saturday evening before going to the movies. Put the clothes in the washer, press the right button and forget it. Later they could be dropped into the drier, where they would be so tumbled as they dried that most of the articles could be folded away without ironing.

Air-conditioning units will so filter the air that dusting will be almost unnecessary. Electrostatic devices will remove the odours of tobacco and of cooking. In fact, by pressing button No. 10 prior to a mid-winter party, the hostess will be able to flood the room with the perfume of spring flowers. Once a week she can press button No. 6 and saturate the air with a fine mist of D.D.T. or other chemical to kill moths and flies. Ultra-violet lamps will sterilize the air and small lamps strategically placed will sterilize toothbrushes and other articles.

Instead of working over the tub on Monday morning, she will rest in her living room watching a televised shopping film to guide her in shopping. Or she may be drying her hair with an infra-red drier. While this is going on she may be dictating a letter on the new type of magnetized wire recorder or sensitized paper conveying to distant members of the family her voice as well as her message. Perhaps, unless she gets laid up with "push-button fingeritis", she may even have time to do a little part-time work for the hospital!

Save steps for her . . .



Save time for him . . .



When one of your doctors needs an old case history in a hurry, does he have to wait while an attendant goes to a distant storage room to get it?

If he does . . . if your case histories are so bulky that you have to keep the old ones in the storage room . . . you ought to use Recordak.

With it, you can "de-bulk" your files 98% . . . make them so small that you can keep *all* your case histories in your medical record room. Only a few steps, then, to get them out . . . no long trips to distant storage areas . . . and no doctor forced to waste time waiting.

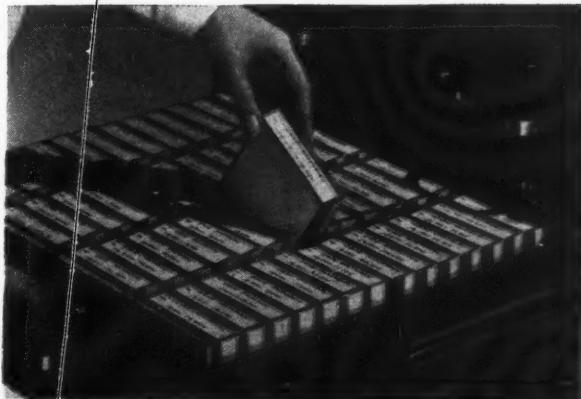
Step-saver . . . time-saver . . . space-saver . . . Recordak is all these things and many more. For the details of these important advantages . . . of how surprisingly little they cost . . . of how they bring new efficiency to many businesses, many industries . . . write for the free book—"50 Billion Records Can't Be Wrong."

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8

◀ Provincial Notes ▶

British Columbia

VERNON. Hospitalization history will be made in Vernon and the North Okanagan district this year if plans, now under way, mature for the erection of a new reinforced concrete 100-bed hospital. Ratepayers, in December, ratified a \$283,333 money by-law, two-thirds of the estimated cost of the building, and construction is expected to commence sometime this month. The site chosen is slightly north of the present Vernon Jubilee Hospital and will overlap land now occupied by the nurses' home, which it is planned to move a short distance and put to some other use. K. W. Kinnard, retiring president, reported at the annual meeting that 2813 patients were treated at the Vernon Hospital during 1946, of which number, considerably more than half, 1970, were from outside points.

* * * *

CLOVERDALE. Spurred by the necessity of building a 60 to 75-bed hospital the Sites committee of the Surrey Memorial Hospital Society has been authorized to inspect several proposed sites. Buildings committee chairman, W. A. Dickson, has paid a visit to the three-storey modern hospital erected in 1942 at Chilliwack.

* * * *

HOPE. Construction of a new eight-roomed hospital at an estimated cost of \$8,000 will commence as soon as weather conditions permit, according to Ben Morrison, chairman of the newly-formed hospital board.

* * * *

KELOWNA. Board of Directors of the Kelowna Hospital at their annual meeting rejected a motion to have a medical representative on the board. The movement to have a doctor on

the board was sponsored by Dr. D. M. Black.

* * * *

NANAIMO. City Council has forwarded to the hospital board a request received from the Local Council of Women to have steps taken to establish an isolation ward at the Nanaimo Hospital.

* * * *

PRINCE RUPERT. A trip down the frozen Naas River by hand sled, over the ice to tide water and thence to Prince Rupert by gasboat was the experience of Peter Calder, chief of the Greenville Kitlakdamik tribe of Naas River Indians, now recovering in hospital from a broken leg, received when his horse kicked him. From Greenville to Red Bluff is fifteen miles and the trip by hand sled took five hours due to the intense pain suffered by the chief. Port Simpson was reached by gasboat and there the patient received preliminary treatment by Dr. John McDonald before continuing the last lap of the journey to Prince Rupert.

* * * *

BURNABY. Official opening of the \$750,000 George Derby Health and Occupational Centre has been set for April 10. Completed under the direction of the Royal Canadian Engineers for the Department of Veterans Affairs, the 200-bed hospital overlooks Burnaby Lake and is located on a 22-acre plateau. Besides the administration building the centre comprises eight pavilions, each with 24 beds and separate screened porch. Other facilities include an auditorium and gym, tiled swimming pool, hydrotherapy, physical therapy and other special treatment rooms.

* * * *

VICTORIA. Royal Jubilee Hospital, in a four-page brief to City Council, has asked for an extra \$44,600 in order to provide "funds to enable the hospital to continue in opera-

tion". It was asked that \$25,000 be made available immediately for payment of overdue trade accounts; that Victoria's annual grant be increased from \$55,000 to \$60,000; that the sum of \$13,600 be paid in settlement of the loss incurred by the hospital's care of city indigent patients during 1946; and that the arrangement for the care of isolation cases be revised and that the city agree to being charged at cost for these cases. The brief declared that "the cost of hospital care has been raised above the ability of the average individual to meet in full" and pointed out that, although daily rates for ward care were raised by \$1 during 1946, this resulted in a decline in collections, for many who were able to pay the old rate of \$3.50 in full were now unable to pay the new rate of \$4.50 "without real hardship". Deficits were caused, in addition to wages and prices, it was stated, by loss incurred in the care of isolation cases; in the operation of the public health laboratory (a large part of which was for city residents); in caring for indigents of the city; and in the operation of an eight-bed psychiatric ward where "revenues from patients cannot possibly meet the expenses incurred".

Alberta

CALGARY. Possibility that the city may utilize the hospital facilities of one or more of the former R.C.A.F. establishments is disclosed in a recent announcement by Alderman Don Mackay, who stated that the Dominion government would be requested without delay to permit the city to use the available accommodation for convalescent cases. Such a plan is in use by the Col. Belcher Hospital and would relieve the shortage of space at the General Hospital, it was said.

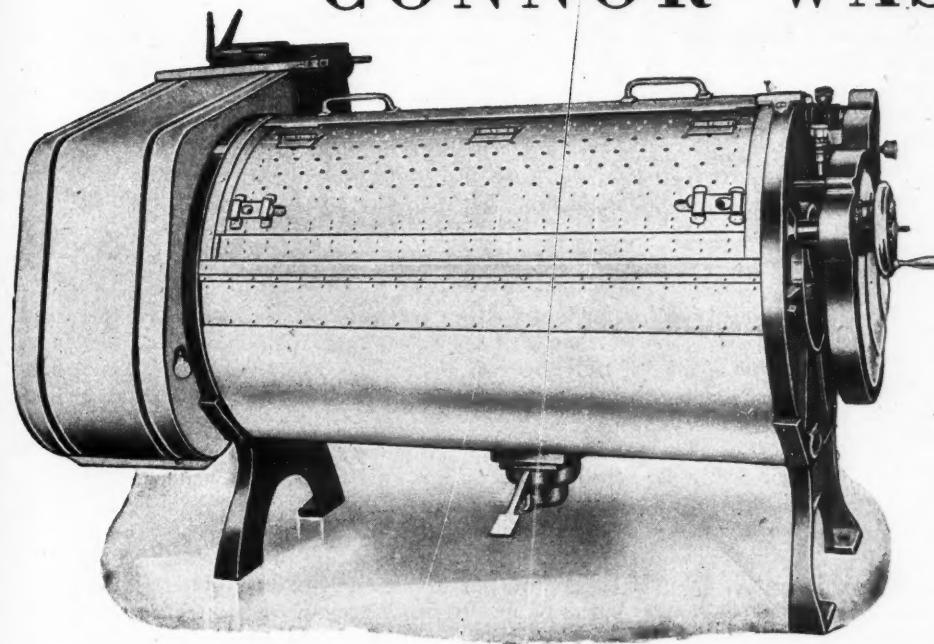
* * * *

CAMROSE. Early summer opening of the new mental institution, the former Camrose normal school, is expected to relieve congestion in the province's mental hospitals, according to an announcement made by the department of Public Health. The new mental institution will have accommodation for about 200 beds

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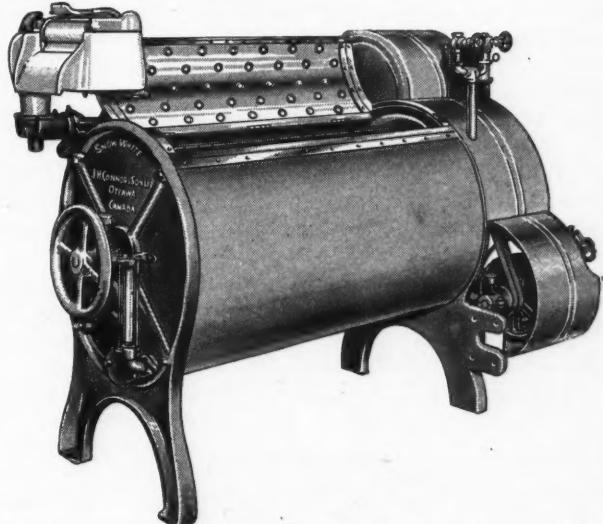
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and will be used in the treatment of aged mental patients now in other provincial hospitals.

* * * *

Saskatchewan

SASKATOON. City Council has approved expenditure of \$130,620 for the installation of additional steam generating equipment and construction and equipping of a new laundry at City Hospital. The hospital's board of governors, which made the recommendation, suggested that a new laundry building of tile and stucco should be built behind the west wing. The structure would cost about \$43,820; the necessary equipment around \$28,000; and the steam generating equipment approximately \$58,800. The sum of \$40,000 has been included in hospital estimates for the year under capital expenditure to pay a portion of the project. It is proposed to include in the estimates a similar sum each year until the total has been reached.

Manitoba

WINNIPEG. A new Children's Hospital, costing more than \$1,500,000, will be built in the planned medical centre at the site of the present General hospital, according to a recent announcement by the hospital's board of directors. Facilities at the present Children's Hospital, built in 1910, are "now entirely inadequate" the board reports. The new hospital will have 180 beds, the latest modern equipment and a nurses' training school and living quarters. Range of service of the Children's Hospital extends from the Head of the Lakes into Saskatchewan.

* * * *

WINNIPEG. Excavation work has begun on the \$200,000 centre of the Mall Medical Group on the site opposite the Hudson's Bay Company store on Memorial Boulevard. The Mall Medical Group is an association of twelve specialists, most of them with overseas service in the war, and the building, which is expected to be completed before the end of 1947, will solve their problem of lack of facilities and office space. Designed by Green-Blankstein- Rus-

sell, architects, the building will be two storeys in height on a full basement with a tyndall stone front on the Mall side. The completed centre will represent a fairly recent development in medicine in both Canada and the United States—group practice.

toward building was sponsored by the Rotary Club following a survey of the area which revealed that with an estimated population of 25,000 the present 100-bed hospital is felt to be inadequate.

* * * *

Ontario

FORT WILLIAM. A referendum for the expenditure of \$950,000 for the renovation of McKellar General Hospital and the construction of a five-storey, 150-bed addition will be placed before the ratepayers immediately. If sanctioned by the ratepayers the amount would be the city's share in a planned expenditure totalling between \$1,350,000 and \$1,500,000, including the 150-bed extension and rehabilitating the present structure and services—such as new operating theatres, kitchen, dietary facilities and other service department changes. Cost estimates, prepared by a firm of Toronto consultant architects who are specialists in the field of hospital design, were based on both a unit and a volume basis and were as accurate as such methods permit. The special committee of the hospital has estimated that a year would be needed for building and with immediate action by council to start the machinery the new hospital quarters would not be ready for occupancy before early 1949.

* * * *

SAULT STE. MARIE. Initial plans were outlined at the annual meeting of the hospital association for a five-storey wing to the Plummer Memorial Hospital. F. J. Davey, president, announced that it is proposed to have the new addition accommodate 58 beds, making a total of 120 beds for the hospital.

* * * *

BARRIE. A committee has been named to raise approximately one million dollars for a new 150-bed memorial hospital for Barrie and district. Consideration is being given toward establishing free treatment for veterans. The initial movement

MEAFORD. A campaign is under way to raise funds for a new hospital building in keeping with community needs. It is proposed to provide x-ray facilities for emergency cases which at the present time must be removed eighteen miles for treatment. Objective of the drive for funds is \$150,000.

* * * *

CLINTON. Plans have been approved and contract awarded for a \$90,000 new wing to the Community Hospital. The two-storey addition will be 42 feet wide and 68 feet long and will be of steel construction with brick outer walls on concrete foundation. The floors will be of smooth surface concrete. The plans and construction provide for a third storey elevation for future requirements. Appointments of the new wing will be for 24 beds, a maternity ward, a dining room in the basement and an elevator. L. C. Bridgman of London is the architect.

* * * *

HAMILTON. The two new pavilions now under construction at the General and Mount Hamilton Hospitals are expected to be ready by May, according to an announcement made by Dr. J. B. Neilson, acting medical superintendent of the General Hospital. The General Hospital pavilion will accommodate 48 patients, while the pavilion at the Mount Hamilton Hospital will house nurses now quartered on the top floor, thus releasing this floor for patients.

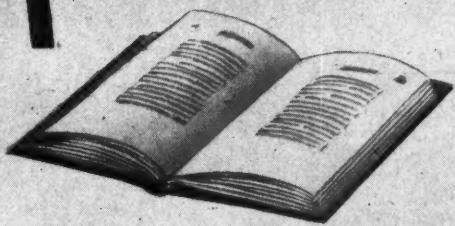
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KITCHENER. The new provincially-subsidized pathologist's laboratory at the Kitchener-Waterloo Hospital has been opened and research is in charge of Dr. L. C. Fischer who has helped establish the unit. Dr. Fischer

(Concluded on page 64)

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Maritime Hospital Association Plans Institute for Administrators

An Institute on Hospital Administration under the auspices of the Maritime Hospital Association and sponsored by the American College of Hospital Administrators will be held at the Admiral Beatty Hotel in Saint John, N.B. Tentative dates for the Institute, first of its kind in the Maritimes, have been set for Thursday, May 29th to Tuesday, June 3rd, just prior to the annual meeting of the Maritime Hospital Association, and delegates will proceed from the Institute to St. Andrews-by-the-Sea for the four-day convention. Ralph H. Gale, superintendent of Saint John General Hospital, is chairman of the committee and arrangements are well underway.

is assisted by a staff of five technicians. The laboratory is not quite complete but when fully established will have six departments—food, enteric diseases, the two principle venereal diseases, tuberculosis and diphtheria.

Quebec

Montreal. Announcement has been made by Hon. Dr. J. H. A. Paquette, Quebec Minister of Health, that as part of the \$10,000,000 provincial anti-tuberculosis campaign, an increase of several hundred beds for the care of tuberculosis patients in the Montreal district will be made available. Mr. Paquette said further that a number of new sanatoria are being built throughout the province and the educational campaign conducted in the regions where tuberculosis is evident, is being intensified. It is planned, Dr. Paquette said, to move the orthopaedic institute, better known as the Samson Institute, which now occupies 300 beds in the Cartierville Sacred Heart Hospital, leaving 1,000 beds free there for the care of Tbc. and cancer patients, exclusively. A new orthopaedic institute, to be built at a site yet to be announced, would place 400 beds at the disposition of the Samson patients, it was stated. Maisonneuve will be the site of construction, within a few months, of a \$1,000,000 hospital which will take care of general cases in Eastern Montreal. Other projects started or to be started in the province in the near

future include: The Gaspe Sanatorium, 260 beds; Ste. Germaine de Dorchester, 200 beds; extension to the Mont Joli Sanatorium, 600 beds; Rouyn - Noranada, 150 beds; St. Eleuthere, Kamouraska, 50 beds; Joliette, 150 beds; Sorel, 150 beds; Three Rivers, maternity, 200 beds; Protestant Hospital, Sherbrooke, 100 beds; extension to the St. Francois d'Assise Hospital, Quebec, 200 beds; extension to the St. Dominique Orphanage, Three Rivers, 100 beds. These total in all an addition of nearly 2,000 beds in the various hospitals devoted to the care of tuberculosis patients, without including those that would be provided by the construction of the Maisonneuve hospital.

* * * *

DRUMMONDVILLE. It is expected that work will commence at once on the construction of a new 100-bed hospital, according to information from Mr. Bernard, deputy of Drummond at Quebec. Drawing of the plans for the new hospital was executed by L. N. Audet, Sherbrooke architect.

* * * *

QUEBEC CITY. The Minister of Health for Quebec, Dr. J. H. A. Paquette, announced recently in the legislature that a sanatorium will be built at Abitibi in the near future. Other new hospital construction contemplated includes hospitals at Maisonneuve, Cap-de-la-Madeleine and Malartic, and a maternity hospital in Quebec City.

Montreal. At the Annual Meeting of the Hôpital Sainte-Justine plans were announced for the erection of a new hospital which will have accommodation for 800 children. An option has been taken on a site on Ste. Catherine Street.

New Brunswick

Saint John. Department of Veterans Affairs has announced the appointment of Robert P. Scott as business manager of the Lancaster Hospital. Mr. Scott has left the post of senior counsellor in the training division of the department to take over his new duties. Prior to the war he held principalships on the staffs of several local schools and during the war spent five years overseas on administrative duties with reinforcement units.

* * * *

RIVERSIDE. Negotiations are under way to establish a doctor in the Riverside-Albert area of Albert county, according to officials of the Seventh Day Adventists attending the recent Maritime conference. The McClelan Memorial Hospital, which had been in operation since 1922 and was forced to close its doors in 1944 when the first resident doctor, Dr. J. E. N. Carnwath, retired after 44 years of service, will be re-opened if the efforts to secure a doctor are successful. The hospital, a memorial to A. R. McClelan, one-time lieutenant-governor of the province, stands empty, fully equipped, and there is sufficient room for thirteen beds.

* * * *

BLACK'S HARBOR. A new hospital unit has been opened this month, and while the present structure is of a temporary nature until the projected building can be erected, it is complete in every detail in respect to essential equipment. The new unit has a ten-bed capacity, a reception room and quarters for nurses, housekeepers and orderlies. The operating room is completely equipped and it is expected that x-ray equipment will soon be available. Dr. David Allen is the resident physician and Miss Mary Walsh of Chatham is the superintendent of the new hospital unit.



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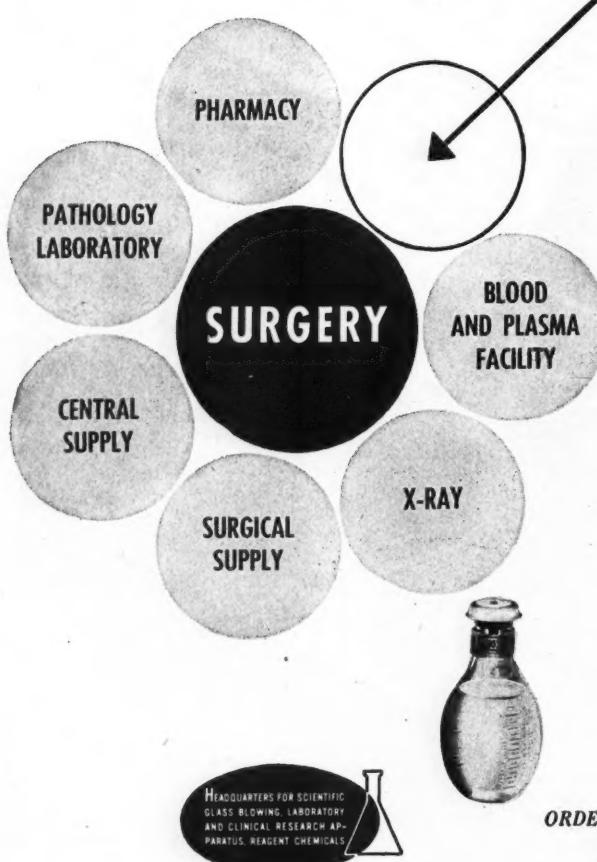
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How Long Should CLINICAL RECORDS of MINORS be Kept?

ACH province has its *Limitations Act* or comparable legislation limiting the period within which action or suit must be taken. Most provinces have special legislation reducing considerably the time within which suits against a hospital for negligence in the care of a patient may be brought, and several have special clauses relating to malpractice suits against physicians. But do these reduced periods of time apply where a hospital has cared for a minor? Does the period—six months, one year or six years—start from the time treatment was discontinued by the hospital, or from the time the patient reached 21 years of age?

We were disturbed to note in an article on the preservation of clinical records by Mr. Emmanuel Hayt, the well-known American legal authority on hospitals and the law, that:

"In the case of children, the statute of limitations for the bringing of negligence actions may not begin to run until the child has reached the age of 21; it may, therefore, be desirable to retain the chart until at least that age is reached".*

The Hospital for Sick Children, Toronto, has obtained an opinion from its legal advisor which would indicate that, in Ontario, the special reduced periods in which action for negligence may be brought against a public hospital (six months) or against a duly registered medical practitioner (one year), date from the time of the service and not from the time when the patient, if a child, attains the age of twenty-one. This viewpoint has been confirmed by the Court of Appeal in a case of medical liability.

* Emmanuel Hayt, "The Legal Future of Microfilming Records", *The Modern Hospital*, 62:1, January 1944.

This opinion of a leading member of the legal profession is worded thus:

"Under our *Limitations Act*, an action for damages for negligence must be commenced within six years from the time the cause of action arose, but when the person injured is an infant the time is reckoned only from the date when he comes of age.

On the other hand it is provided, as you know, by section 39 of *The Public Hospitals Act*, that "any action against a hospital or any nurse or person employed therein for damages for injury caused by negligence in the admission, care, treatment or discharge of any patient shall be brought within six months after such patient is discharged from or ceases to receive treatment at such hospital and not afterwards".

I think it is important to consider in this connection the position of the doctors who may be involved in any such action along with the hospital. There is a similar provision in *The Medical Act*, with which you are probably familiar. Section 39 of that Act provides that "no duly registered member of the College (of Physicians and Surgeons) shall be liable to any action for negligence or malpractice, by reason of professional services requested or rendered, unless such action is commenced within one year from the date when in the matter complained of such professional services terminated".

These statutes provide no alleviation of these restrictions in the case of infant plaintiffs. In some reported cases, an attempt has been made on behalf of persons suing, to establish that the provision in the *Limitations Act*, as to minority not counting in the computation of time, applies as well to the shorter limitations appearing in other acts such as those above quoted, but the decision has always been against such a contention, and the shorter period has been held to govern even where the injured party was an infant. In Ontario the Court of Appeal has thus applied the limitation in *The Medical Act*. As far as I am aware, there is no reported judgment involving the limitation section of *The*

Public Hospitals Act, but as that was not introduced into this Act until 1932, the absence of judicial interpretation is not surprising.

For the purposes of the hospital and its employees and of registered physicians and surgeons, it is clear that no action of the kind described in the sections of *The Public Hospitals Act* and *The Medical Act* quoted above can be commenced in Ontario except within six months and one year respectively after the dates mentioned in those sections. If, after the expiry of one year from the discharge or cessation of treatment, or from the termination of professional services, as the case may be, no action had been brought, there would be no need for retaining the records longer but, of necessity, a further period should be allowed to elapse in order to determine whether the records would be useful in litigation commenced within the period of limitation, but not brought to trial until some time considerably later. Perhaps a period of two years after the expiry of the limitation period would suffice for this purpose.

It must be borne in mind that what I have said as to statutory protection relates only to this Province, where any action against the hospital would naturally be brought. I have not dealt with the law of the other Provinces which is I believe, in some cases at least, different to that of Ontario. Further, it should be noted that the protection of *The Public Hospitals Act* is available only to public hospitals... Similarly the doctors must be registered members of the College to enjoy the protection of *The Medical Act*.

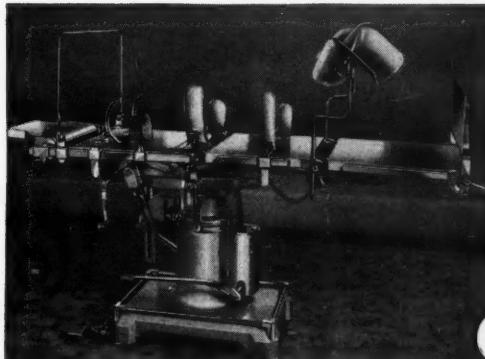
As to any actions not within the provisions of the two sections quoted, as for instance an action by a patient or a municipality against the hospital for an accounting for charges for maintenance, would come within the general *Limitations Act* and the exception as to the time of minority would apply.

There are some other features of the problem which should not be overlooked. If an action should be brought claiming negligence in the treatment of a child in the hospital on a recent admission, the records of previous admissions and treatments in the hospital, possibly several years before, might be of importance. Then too, it may be that in an action by the hospital itself for charges for maintenance or for some other relief, the patient's records would be valuable as evidence

It might well be that in other provinces, irrespective of reduced periods of time for bringing action against a hospital or physician, the period of liability might commence at 21 as indicated by Mr. Hayt. This could be a point for study by the respective provincial hospital and medical associations.

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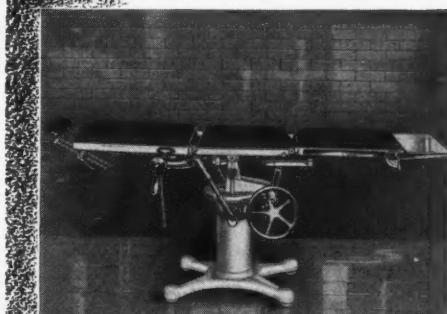
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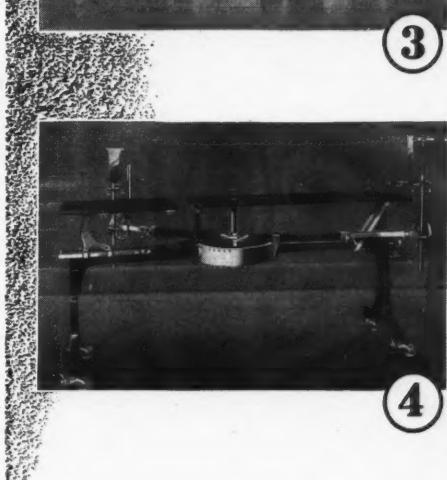
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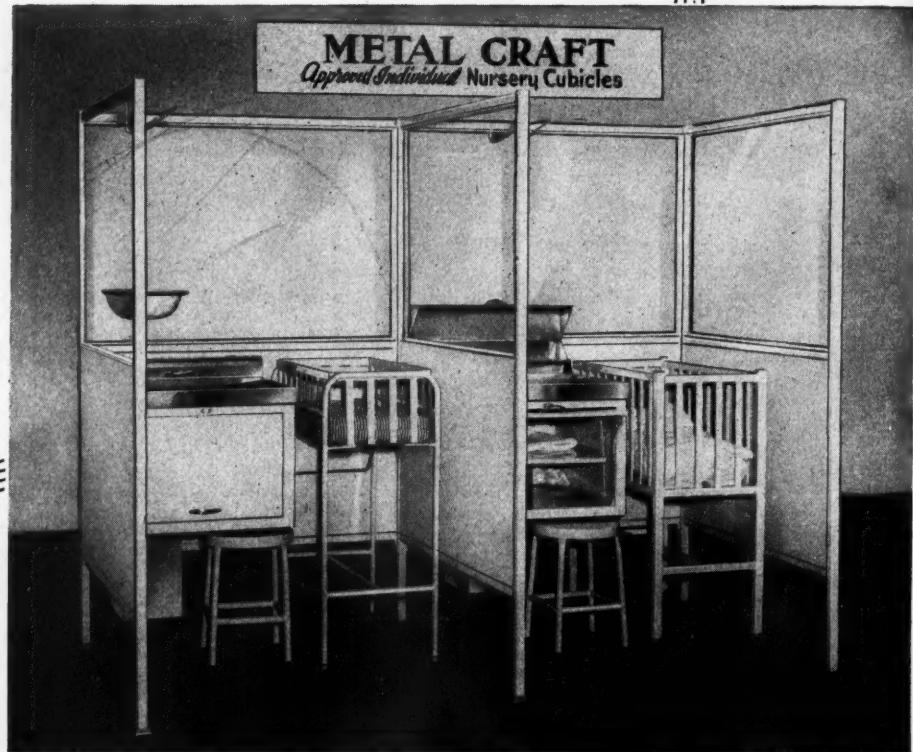
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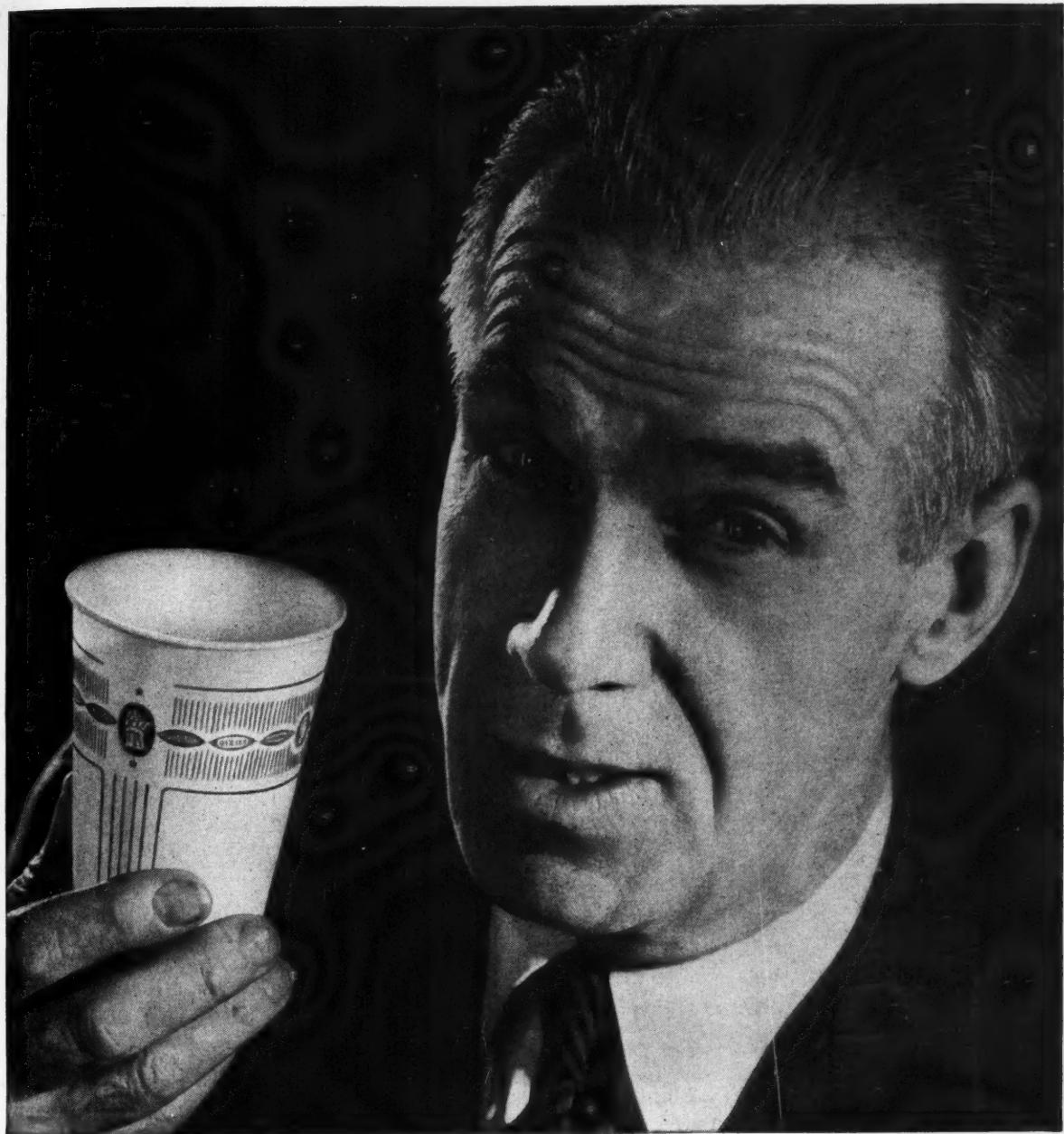
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APRIL, 1947

◀ Book Reviews ▶

THE ESSENTIALS OF OBSTETRICS AND GYNAECOLOGY. By William Albert Scott, B.A., M.B., F.R.C.S. (Can.), F.R.C.O.G. (Eng.) Professor of Obstetrics and Gynaecology, University of Toronto, and H. Brookfield Van Wyck, B.A., M.B., F.R.C.S. (Can.), F.R.C.O.G. (Eng.) Assistant Professor of Obstetrics and Gynaecology, University of Toronto. Pp. 390, Illustrated. 1946. The MacMillan Company of Canada Limited. \$5.50.

Reduced to essential simplicity the material in this manual is an attempt to set out the fundamentals of obstetrics and gynaecology and produce an outline of the subject that might be of value both to undergraduates and to the general practitioner. In writing *The Essentials of Obstetrics and Gynaecology* the authors have been guided by the range of the basic course of lectures given to the undergraduate years in the Faculty of Medicine, University of Toronto. It is pointed out that the larger text books before the students of today will be of more value if the initial training in the subject is confined and, as a result, perhaps more thoroughly grasped. Such pre-knowledge the authors hope is contained in this manual and will help graduates to a clearer, more concise comprehension of the two subjects. Essentially, it is the belief that if the principles necessary for the practice of this branch of medicine are clearly exemplified the book may be of value to the practitioner as well as to the student. In presenting *The Essentials of Obstetrics and Gynaecology* all needless introduction of controversial matter has been eliminated and the outline stands out as a guide to a systematic study of the subjects.

* * * *

IMPROVISED EQUIPMENT IN THE HOME CARE OF THE SICK. by Lyla M. Olson, Reg.N., Superintendent of Nurses, Kahler Hospital, Rochester, Minnesota. Pp. 265. Fourth Edition, illust. \$1.75. W. B. Saunders Company, Philadelphia and London, 1947. Canadian Agents—McAinsh & Co. Limited, Toronto, Ont.

In this new edition, the fourth, the author has enhanced the usefulness of the handbook by the introduction of many new ideas, elimination of inferable statements and the topical grouping of subjects. *Improv-*

vised Equipment in the Home Care of the Sick was the outcome of the author's discovery over two decades ago of the dearth of such material when she was asked to give a demonstration on improvised equipment. At the same time she became aware of the genuine interest in the subject among nurses in general, and of the fact that improvised equipment can be used not only in the home care of the sick but in hospitals of limited means. In this connection the author suggests that methods of improvising should be taught in the classroom of every school of nursing. The value of this handbook is its usefulness not only to the professional nurse but also to the home-maker upon whom rests the responsibility for the care of the largest percentage of the sick. It should serve as a basis to stimulate other ingenious substitutions in giving care to the sick and a greater feeling of self-confidence on the part of the nurse.

* * * *

RECOMMENDATIONS FOR FOOD SERVICE IN A FIFTY-BED HOSPITAL. Prepared under the direction of Dr. L. B. Pett, Chief of the Nutrition Division, Department of National Health and Welfare, Ottawa, Canada. Pp. 36. Illustrated with tables. 1946.

This study presents, with small additions and changes, the recommendations contained in a report prepared by Miss Winifred J. Moyle, as the result of a survey of twenty-six small hospitals in the Province of Manitoba. The survey was a joint enterprise of the Nutrition Division at Ottawa and that province. Since there is widespread interest in the problems of small hospitals throughout this country, this summary in mimeographed form has been made available to the public by the Department of National Health and Welfare.

The Hospital Design Division of the Department has contributed two clear, black-and-white line drawings. The first is a plan for a hospital kitchen and storerooms, with the required facilities indicated. The second is a plan for a combination floor pantry and formula room located on the same floor as the nursery.

The recommendations include every phase of food service: kitchen layout and facilities; equipment lists

and detailed instructions with respect to the care of equipment; cost accounting; menu planning; food preparation; sanitation; and staff, indicating qualifications and duties. Finally the book contains a listing of approved post-graduate training courses for dietitians; a listing of university courses in household science which have been approved by the Canadian Dietetic Association; and a list of reference books for dietitians.

This volume is a compilation of data invaluable to dietitians in small hospitals and should be kept on hand for the use of other dietary staff members as well. A limited number of copies is now available through the Department of National Health and Welfare and it is expected that a second edition will be prepared at a later date.

Hospital Administration Course Opens at Iowa State University

A course in Hospital Administration has been established by the Board of Education of the Iowa State University and will cover a two-year program in administrative internship and residency. Since internship training for hospital administration is still in its experimental stage, the exact length and full content of the program is being developed according to a flexible educational pattern. Candidates eligible for admission include those persons in the hospital field who have demonstrated unusual achievement, and graduates of the academic portion of the university courses in Hospital Administration at Chicago, Northwestern, Columbia, Washington, St. Louis and Minnesota.

Degrees offered will be the Masters or Doctors in Hospital Administration, and the program is under the direction of Dean Carlyle Jacobsen, Dean of the Graduate College, and Gerhard Hartman, Ph.D., Superintendent of University Hospitals and Professor of Hospital Administration.

The horizon of the medical record librarian should not be too narrow and circumscribed. Her training equips her to go anywhere—even to the most senior positions in the hospital.—R. Fraser Armstrong.

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Treatment of Syphilis by Penicillin

LIKE many another new form of therapy, the penicillin treatment of syphilis has progressed through the cycle of dubiety, enthusiasm and reaction. Mahoney's original report that penicillin is effectual against *T. pallidum* was received with some caution, but as laboratory and clinical confirmation of this observation rapidly became available, reserve quickly gave way to enthusiasm. So promising did this new form of therapy appear that in September, 1943, within three months of the first public announcement, a nationwide co-operative study was organized under the auspices of the Committee on Medical Research. In less than a year penicillin was adopted for routine use in early syphilis by the United States Army. Since then the limitations of this form of therapy gradually have become apparent.

Even the most sceptical observer no longer denies that penicillin is a valuable adjunct to syphilitotherapy nor that it is, in some respects, superior to any previous form of treatment. That it has serious drawbacks is recognized by its most ardent protagonists.

The principal advantages of penicillin in the treatment of syphilis are its lack of toxicity, and the fact that the therapeutic schedule need not be inordinately prolonged. Consequently, the full course of treatment is almost invariably completed. This is not the case with any form of arsenotherapy, where toxic reactions increase in frequency the more the total duration of treatment is compressed, and where case-holding becomes increasingly difficult as the time period of therapy is prolonged.

The principal disadvantages of penicillin therapy are the probable essentiality of hospitalization, when

the drug is given in aqueous solution, and the significant number of treatment failures (relapse and seroresistance in early syphilis, submaximal improvement in certain forms of late syphilis).

In early syphilis, the results of penicillin therapy are conditioned largely by two factors: (1) the duration of the disease; and (2) the time-dose relationships of penicillin administration.

As with all other forms of therapy, the earlier in the course of syphilitic infection penicillin treatment is begun, the better are the results. In the Army, the failure rate in secondary syphilis was more than four times that of patients treated in the primary stage of the disease.

There is ample evidence, both from the clinic and from the laboratory, that the therapeutic effectiveness of penicillin is profoundly influenced by the time-dose relationships of its administration. Penicillin, unlike arsenic, is not bound by spirochetal organisms and its activity

appears to depend upon the length of time during which therapeutically effective levels are available at the site of action. Precisely what the minimum effective level is and how long it must be maintained have not yet been determined. It is clear, however, that penicillin is actively treponemcidal in extremely low concentrations. It is also evident that relatively low concentrations acting over long periods of time are far more efficacious than high concentrations of brief duration. Increasing the tissue levels of penicillin, by giving higher dosages per injection does tend to increase its therapeutic effectiveness in the treatment of syphilis, at least up to a certain point. Of far greater importance, however, appears to be the time period over which *T. pallidum* is exposed to the action

of the drug. Increased total doses of penicillin thus influence the results of therapy more if used to prolong the course of treatment than if given to augment the blood level at any one time.

The necessity of hospitalization for patients receiving penicillin as therapy for syphilis significantly reduces its general utility, for the number of hospital beds available for this purpose is limited.

To be feasible as an agent for treatment of ambulatory syphilis patients in the clinic and in the physician's office, a modified penicillin with prolonged activity is desirable. Many attempts have been made to extend the duration of penicillin action, either by delaying its absorption or by blocking its renal tubular excretion, but by far the most satisfactory modification presently available is the suspension of penicillin in peanut oil and beeswax ("POB").

"POB" has been used in the treatment of syphilis. Preliminary reports suggest that the results may be sufficiently satisfactory to warrant more widespread application. Treatment schedules utilizing "POB", alone and in combination with mapharsen or bismuth, are being evaluated currently by the clinics cooperating in the nationwide syphilis study. Already there is some indication that with as much as 9.6 million units of penicillin in oil and beeswax over a period of 16 days, there is a not inconsiderable number of treatment failures.

Indeed, with any schedule of penicillin administration the results of which are presently available, there has been a high incidence of treatment failures. "Relapse" rates after the Army employed 2,400,000 units in seven and one-half days have been several times as high as those after any schedule of arsenobismuth therapy, prolonged or intensive (provided that the latter were fully completed).

There is here involved the possibility that penicillin actually may be more efficacious in early syphilis than appears from this comparison, and that many so-called relapses actually represent reinfection. Unfortunately, this point is incapable of determination on the basis of existing clinical and experimental data.

It is believed that this excessively
(Continued on page 80)

From an Editorial in "Annals of Internal Medicine" January, 1947.

A Treatment of Teno-synovitis by means of 'Elastoplast'

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On the 16th January, a bricklayer, age 31, complained of pain at the wrist, which was particularly noticeable when grasping.

A radiograph revealed nothing abnormal, but clinically there was synovial crepitation in the extensors. The fingers were immobilised by strapping them over a roller bandage with "Elastoplast" bandage, which also bound the wrist.

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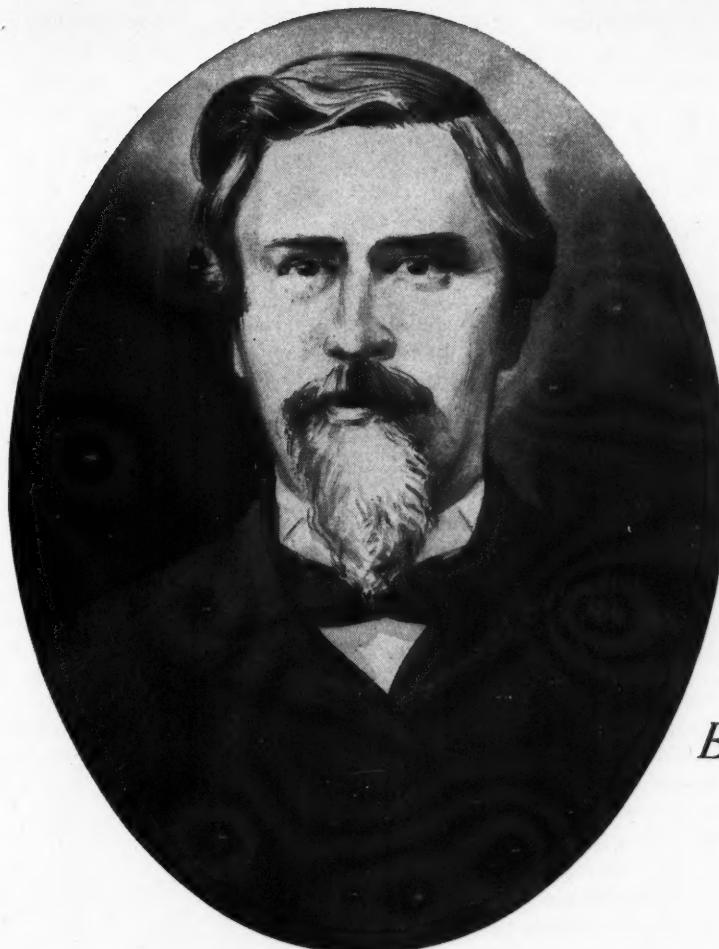
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Thomas*

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Treatment of Syphilis (Continued from page 76)

high incidence of treatment failures from penicillin may be reduced in two ways. The total duration of therapy may be prolonged, in which case there arises the problem of case-holding, so frequently encountered during metal chemotherapy. Perhaps a more promising approach is the addition to the penicillin treatment scheme of concurrently administered metal chemotherapy.

Eagle and his co-workers have demonstrated that when penicillin and oxophenarsine hydrochloride are administered concurrently to syphilitic rabbits, the therapeutic effects not only are additive but actually synergistic. This important laboratory observation has been studied by the clinics co-operating in the penicillin study, and the clinical results following the use of penicillin with an arsenoxide have proved superior to those with penicillin alone. Administered in combination with bismuth, the immediate clinical results also have been superior to those with penicillin alone.

It must be recognized, however, that the concurrent administration of arsenicals introduces a risk of serious reactions in direct proportion to the total amount of the drug given, and in inverse proportion to the time interval over which it is administered.

In view of this and other considerations, there is no unanimity of opinion as to the desirability of combining penicillin and oxophenarsine hydrochloride in the routine treatment of early syphilis. Some have expressed the belief that the results with penicillin alone, when administered in adequate amounts over a long enough period of time, are satisfactory in a sufficiently large proportion of patients to justify eliminating arsenicals from the original course of treatment, reserving their use for relapsing cases. Others believe that the additional therapeutic effectiveness provided by arsenic warrants the increased risk.

In the management of neurosyphilis, penicillin is proving of significant worth. Upon the cerebrospinal fluid abnormalities and especially upon the pleocytosis and elevated protein content, which have been considered an indication of the "activity" of the process in the

central nervous system (Dattner-Thomas), penicillin exerts a profoundly favorable effect.

In asymptomatic neurosyphilis, where the only evidence of involvement of the central nervous system is an abnormal spinal fluid, the results of therapy can be adjudged only by the response of the spinal fluid and the incidence of progression to clinical neurosyphilis. The spinal fluid abnormalities in early and late asymptomatic neurosyphilis respond dramatically to penicillin. Improvement is manifest promptly on cell count and protein content, more gradually on the colloidal test, and last of all, on the Wassermann reaction. Spinal fluid normality, once achieved, seems usually to be stable. The rapidity with which the spinal fluid becomes normal following penicillin therapy is dependent upon the degree of the pre-treatment abnormalities and the duration of the syphilitic infection. Lesser degrees of abnormality and those occurring within the first two years of the disease disappear rapidly; those more extensive and of longer duration improve slowly over a period of years.

The clinical manifestations of neurosyphilis are protean: some due to active inflammation, others to degenerative processes; some reversible, others the result of irreparable damage of neural tissues. In its effects upon these clinical manifestations, which include such widely dissimilar symptom complexes as acute syphilitic meningitis, general paresis, tabes dorsalis, and Erb's spastic paraparesis, the presently available information suggests that penicillin is superior to metal chemotherapy but that it gives little promise of clinical results in parenchymatous neurosyphilis superior to those obtainable with fever therapy.

It should be pointed out, however, that such improvement as does follow penicillin therapy is attained at no risk to the patient, and in a shorter time and with less inconvenience to him than attends either therapeutic fever or protracted metal chemotherapy.

In acute syphilitic meningitis, the results of therapy with penicillin used alone are excellent, but in parenchymatous neurosyphilis, less outstandingly favorable. In at least one clinic which has used both pen-

cillin alone and penicillin as an adjunct to malarial fever therapy, greater success in general paresis and in tabes dorsalis has been obtained with the combined therapy. There also are indications that penicillin alone may prove inferior to malaria plus penicillin in primary optic atrophy, late syphilitic nerve deafness, and Erb's spastic paraparesis.

For the present at least, there is reason to believe that the concurrent administration of penicillin with malarial fever therapy offers the patient with late parenchymatous neurosyphilis the greatest promise of a favorable outcome. It is probably the treatment of choice, therefore, in those forms of neurosyphilis which carry a serious risk to life or important bodily function: namely, paresis and taboparesis, primary optic atrophy and nerve deafness. In acute syphilitic meningitis, early or late asymptomatic neurosyphilis and in meningovascular neurosyphilis, therapy with penicillin alone may be given initially with good prospects of a favorable response.

Gummatus lesions of the skin and bony skeleton, and of such viscera as the liver heal under therapy with penicillin. The healing process is no more rapid than with metal chemotherapy. Inflammatory ocular lesions respond quickly, excepting interstitial keratitis where the results are no better than with older forms of therapy.

In cardiovascular syphilis and in late latent syphilis, the evaluation of the usefulness of any therapeutic agent involves many years of post-treatment observation. There is as yet, therefore, no information as to the results of penicillin therapy in these conditions. Caution has been urged in the use of large initial doses of penicillin in the presence of overt cardiovascular syphilis, in view of the possible complications from therapeutic shock.

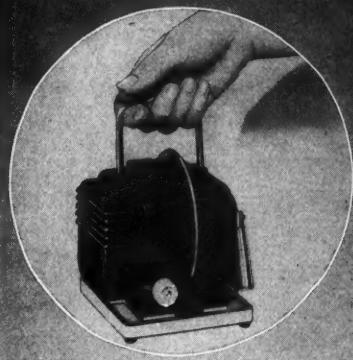
It is obvious, however, that treatment with penicillin offers nothing to those with late latent syphilis whose serologic tests remain positive following prolonged chemotherapy. To subject these patients to further therapy of any kind solely for the purpose of attaining seronegativity, is to kindle false hopes and to waste time, money and effort.

(Concluded on page 84)

Suction devices

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Rockefeller Report Praises Manitoba Health Plan

"The Manitoba Health Plan is the most realistic approach in Canada that we have knowledge of, for the provision of better health services." This is the opinion expressed by the Rockefeller Foundation on Personnel Training Requirements in a report of the Manitoba Health Services Act released recently. The report covers the survey conducted last September and refers to the briefs submitted by the various organizations, including the Manitoba Federation of Agriculture and Manitoba Pool Elevators.

The report indicates the necessity of a complete re-orientation of thinking in Manitoba in respect to the present training facilities for nurses, technicians, doctors, dentists, and other personnel that may be required. . . . At the moment the most important thing that appears necessary is the appointment, with the least possible delay, of a suitable person to act as full-time professor of social and preventive medicine and assistant dean.

The Commission emphasizes the

point brought out by the Manitoba Health Plan, that is—with the changing trends of medical practice more emphasis must be put on *preventive medicine* because it is impossible in the provision of an adequate service to the people to separate this from the provision of medical care.

It is very evident from the general tenor of the report that the question of providing the necessary workers in the health field is not one which rests with Manitoba alone, but should be applied to the whole of Western Canada. A very strong plea is made by the Special Commission that there should be some consideration given by the four governments and the four universities of Western Canada to the necessity of a re-organization of all the teaching facilities in all the western universities in order that duplication of effort might be avoided and in this way western people might be assured of the properly trained personnel to carry forward the contemplated plans for the improvement of health services to the people.

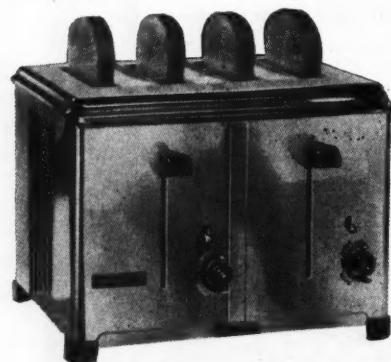
In addition, the Commission urges that the province go ahead as

rapidly as possible with the implementation of their hospital plan, especially in respect to the medical-nursing units, or doctors' workshops; as it is of the opinion the greatest deterrent to physicians settling in rural Manitoba is the lack of adequate diagnostic facilities and hospitalization.—*Manitoba Co-operator* 4:1, December 16, 1946.

Hospital and Medical Staff

The relationship between the hospital and its medical staff is a strange one and yet has logic and is workable. Ideally these men have nothing but the welfare of the patient to consider and are able to call upon the hospital for every sort of contribution it can make to that end. Strictly they have no obligation to the hospital except to observe its rules and the law of the land—their obligation is to the patient. Practically, of course, the relationship is on a much higher basis than this and both parties unite to do the best they can for that innocent and unprotected third party—the patient.

—A. L. Caldwell, M.D., Saskatoon.



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Third Annual C.M.A. Camera Salon

The Canadian Physicians' Fine Art and Camera Salon's third annual showing will be held in the Hudson's Bay auditorium in Winnipeg during the week of the 23rd to 27th of June, in conjunction with the convention of the Canadian Medical Association.

The judges of the Salon this year will be Mr. Alexander Musgrave, curator of the Winnipeg Art Gallery Association; Professor W. Leach and Mr. Newton Brett of Winnipeg.

At the request of Canadian doctors the Salon this year will be divided into three sections; the Fine Arts and monochrome photography of last year will be retained while an additional section for Kodachrome transparencies has been added. The Fine Arts section includes paintings in oil, water colours and tempera, charcoal drawings, pastels and etchings.

Two bronze plaques, sculptured by Miss Eugenia Berlin, S.S.C., will be presented, one to the winner in the Fine Arts section and the other to the winner in the Photographic sec-

tion. Awards of merit will also be presented. Prizes and awards will be made at a meeting of the Medical Association on Thursday, June 26.

The Salon is sponsored by Frank W. Horner Limited of Montreal and since inception it has met with increasing enthusiasm. There are a surprising number of doctors who have adopted painting and photography for hobbies as a welcome relief from the constant strain and overwork of the past few years.

Treatment of Syphilis

(Concluded from page 80)

In the prevention of prenatal infection through treatment of pregnant women with syphilis, penicillin has been highly efficacious. Here it probably is, as Goodwin and Moore suggest, the present therapy of choice. Penicillin readily passes the placental barrier and its treponemcidal action is available to the fetus in utero. It appears, despite the contentions of

some, not to provoke uterine contractions and not to precipitate premature labour. The outlook for a non-syphilitic child following penicillin therapy is excellent. Even among those mothers whose syphilitic infection has been recently acquired and in whom the risk to the child is great, there have been remarkably few treatment failures.

Those treating patients with syphilis have in penicillin a drug of negligible toxicity, readily administered, but with definite limitations in therapeutic effectiveness. It is far from being the ideal form of treatment. Yet it has, for the present at least, a place in the treatment of syphilis as the most desirable form of therapy presently available for certain of the protean manifestations of this disease, and as an adjunct to older methods in others.

Rural dwellers are demanding—and rightly so—all the privileges of city dwellers in the matter of health and hospital care.—*Norman Saunders.*

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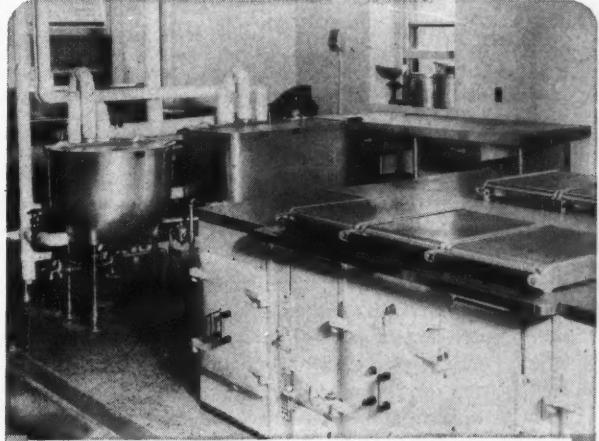
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Employer—Employee (Concluded from page 52)

Merit ratings, salary scales and titles are important to keep things on an even keel. In any schedule there must be enough people involved to take the onus of decisions from any particular one and to prevent favouritism or discrimination. A job evaluation program should grade in work habits, quantity and quality of work performed, co-operation, intelligence, and initiative used and required. *Records must be good* if we are to meet frank criticism and sharp questioning. With workers becoming more articulate as the personal relationship diminishes, the administrator is going to have to do more explaining frequently, and while one is irked by it, he might just as well be realistic and be ready for it.

The question of health hazards benefits is another factor in working conditions—physical examinations, initial x-ray examinations, immunizations, sick leave allowances and the like are, for the most part, just plain good business. They prevent absenteeism and possible future lia-

bilities on the part of the hospital. Housing is another problem. Meal allowances, however, are assets which the hospital has at the minute. Largely because of the possibility of obtaining food not obtainable elsewhere and because of finding a room in which to sleep, hospitals are now obtaining some workers who would otherwise have preferred to work elsewhere.

In closing, Dr. Dwight Barnett's program at Harper Hospital in Detroit should be cited. He worked in conference with his department heads. They lunched together once a week at their own expense; reported on objectives, functions and achievements of the different departments. He got them interested in job analysis and specifications, and then in evaluations. Eventually, he had them urging the employment of a personnel officer for the hospital, and at their request he is setting up a department which will receive complete co-operation from the hospital staff.

This seems a practical and promising way to work toward obtaining the best of employer-employee relationships.

With Hospitals in Britain (Concluded from page 54)

report, *The Lancet* directs attention as supplying a good example, to the type of home provided by the French, "comfortable, friendly, run with humanity and the minimum of interference". The residents come and go as they like, go down to the neighbouring estaminet for coffee or beer and a game of dominoes and sometimes go to stay with their friends or their children for a week or two at their own discretion. Some of our old poor-law workhouses are developing on these lines, but there is still much leeway to be made good.

Another aspect of the subject covered by the Nuffield Committee is the provision made in the old endowed almshouses to be found in all parts of the country. They do not enter, however, into consideration of the accommodation for those who are sick, except so far that, if they are comfortably provided for, their minor illnesses can be cared for in their own homes by a resident district nurse. In this way, too, there is a means of reducing the call upon hospital accommodation.

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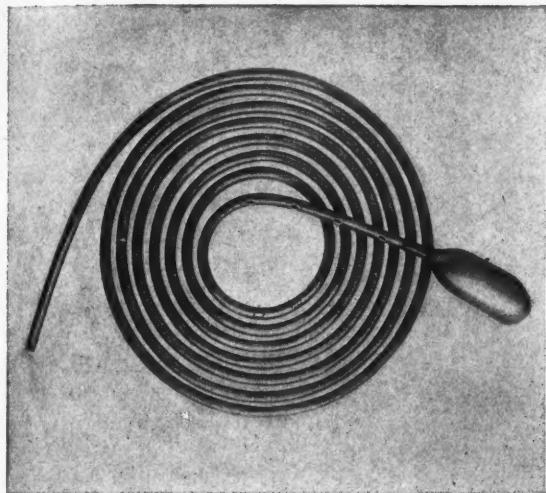
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Secondary dilatation of the stomach can be decompressed by withdrawing the tube a short distance, cutting holes into the tube, and allowing the tube to be pulled down by peristalsis at which point the holes will open to the stomach which, on applying suction, will be decompressed.

Replacement latex bags are easily cemented to the tube.

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Food and Its Service (Concluded from page 43)

There are four mixers—two thirty-quart and two eighty-quart—with adjustable rims to take bowls of various sizes. The eight steam kettles set on stainless steel pedestals vary from twenty to eighty gallon capacity. Also located in this central area are cooks' tables, stainless steel work tables, an electric food chopper and a meat slicer. All equipment has been installed with the minimum amount of exposed piping to facilitate cleaning operations. The canopies over the ranges and fry kettles are equipped with grease filters to lessen the risk of fire.

The main corridor, which is part of the quarter-mile tunnel separates the kitchen and dishwashing room. This tunnel will join the Pulmonary Building (not yet constructed) at the east end of the hospital and goes to the Red Cross Lodge at the west end. The hospital is built in blocks, centred over the tunnel, and elevators opening into this corridor in each block will convey food and dishes from the Dietary Department to the various ward pantries and dining-

rooms. All the large dining-rooms are in the block over the main kitchen.

The main dishwashing room is across the corridor from the kitchen. It has two double tank dish machines and a glass washer. The machines and counters are stainless steel. It is beside the elevators used to bring down the trucks of dirty dishes from the wards and also a dumbwaiter opening into the serveries on each floor in this block. Beside it is the truck-washing room and then the silver storage and burnishing room. There are also three smaller dishwashing rooms in other blocks of the hospital.

Just off the main corridor is a large walk-in deep-freeze refrigerator equipped with enclosed shelving along one side. This inner reach-in part will be kept at twenty degrees below zero and the larger room at twenty degrees above. Thus it will be possible to freeze fresh fruits and vegetables and other foods for use later.

The ward pantries are all equipped with stainless steel cupboards, the top half heated for warming dishes. The coffee urns and stands are also stainless steel with heated drawers

beneath for cups and teapots. There is a two-compartment sink, two-burner electric hot plate, refrigerator and drying cupboard for tea towels.

The total bed capacity of Sunnybrook when all units are completed and functioning will be fourteen hundred and fifty, but it is estimated that a total of eight thousand meals can easily be served each day to patients and staff.

Standards in Nurse Education

It is only too plain that a very considerable number of girls who could adequately and competently perform the normal nursing duties required in the hospitals are being lost to the profession by the attempt to give all, whatever their inclination or aptitudes, a knowledge and qualification requisite only for a senior post.

If we are to have any real amelioration of the nursing shortage the aim of the training course must be orientated towards producing the requisite "general practitioners" and not the "specialists" and "dons" for whom as in any other profession further provisions can be made.

—Editorial, "The Hospital", London.

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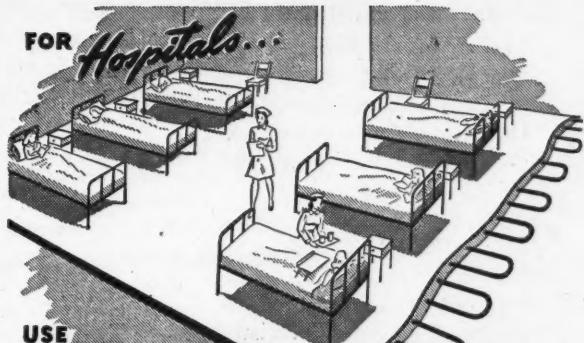
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Laboratory Technologists

(Concluded from page 34)

the pathologists under whom they served. Admission to membership is now obtained by examination and this takes place in the spring and fall of each year.

The C.S.L.T. has gradually grown in stature and is annually adding to its membership. It is now, under agreement with the Canadian Medical Association, the official registry of technologists in Canada. By the advice and counsel of the Advisory Committee to the Society, appointed by the C.M.A., the educational and technical qualifications of technologists have been raised to a standard satisfactory to the medical profession and in conformity with the objects of the C.S.L.T. It is hoped that the standards will be raised still further in the years to come. The fact that many registrants are university graduates would seem to indicate the trend of the times.

It is not yet obligatory for clinical laboratory technologists to be members of the C.S.L.T. I feel that this

development will come through local problems as they arise in the various provinces. In British Columbia a barber cannot cut the hair of his client or shave him unless he has satisfactorily passed an examination in the elementary principles of personal hygiene and barbing, set by a board of examiners created by provincial enactment. Again, the chiropodist, by virtue of legislation, must submit to examination before his peers ere he pares a corn. Nurses, physiotherapists, and other professional workers are registered through legislation. Still other groups who, until a few years ago, were regarded as charlatans are now rigidly controlled by the laws of the land.

The amazing revelation today is that a laboratory technologist, on his own word or a mere written recommendation, may obtain a position in a hospital without any authoritative certification—and his first duty may be the penetration of a patient's vein to withdraw blood for a Kahn. The patient naturally assumes that those in authority have satisfied themselves as to the qualifications of the tech-

nologist. What would be the legal position of a hospital employing a technologist without credentials acceptable in a court of law, in the event of death resulting from septicemia following venipuncture, or an error in blood typing or cross agglutination? Death from the latter cause has occurred all too frequently in Canada. It *can* happen here.

Many hospitals in this country are already aware of their responsibility and have properly registered technologists on their staffs. One of the largest hospitals in Vancouver will employ only certified technologists. I am quite sure, however, that many hospital administrators do not realize the danger of the position in which they may find themselves through failing to observe this very necessary precaution in the interest of public safety. I suggest that the hospitals of this province (British Columbia) should give serious consideration to the desirability of recommending to the Honourable, the Minister of Health, the urgent need for legislation requiring certification of all clinical laboratory technologists.

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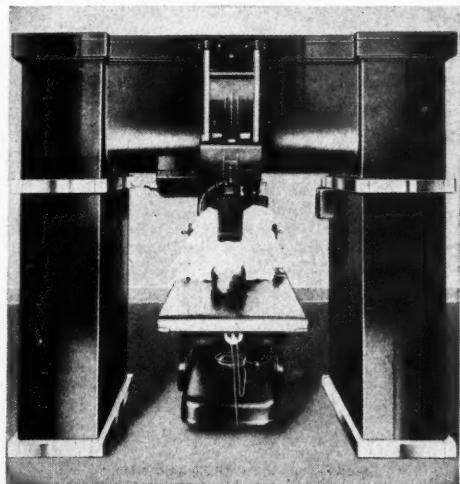
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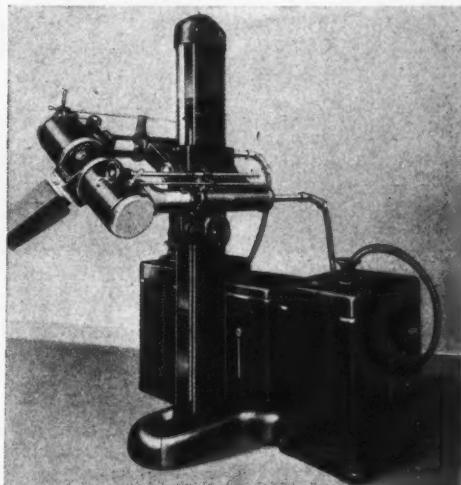
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Group Practice

(Concluded from page 46)

an advantage over the lone specialist. It would seem that the primary cause for criticism might be the objection of the individual to the advantage of his neighbours, who grow in strength through unity. This does not mean that groups do not deserve fair criticism. The group is a collection of individuals, and individuals are not perfect. The just critic will, however, know his subject before he speaks his mind. None of us would care to be judged wholly on our weakest points.

To some, the formation and operation of a group practice may seem a simple matter. Those who know the practising physician and surgeon will realize the magnitude of the personnel problem alone. The greatest asset which any group can possess is the personnel of which it is composed.

I believe group practice has been in existence on this continent long enough to have demonstrated that at least certain types of group practice are a real asset economically. They will remain so, whether medical care

is administered as heretofore or by some type of health insurance or state medicine. The health of the profession should and can be conserved better in group practice than in any other way. Ambulatory problem cases can be as thoroughly investigated in a clinic of specialists as they can in a hospital, and without occupying hospital beds. This can be done more reasonably by a group, because of the control of overhead, than in several separate offices. The co-ordination of all findings into a final opinion, by one experienced in this art, is a very great advantage to the patient's health and treasury.

Laundry Problems

(Concluded from page 31)

ironing easier and leaves a better finish and faster production. Repellents may be applied in the washer in the last rinse, or in conjunction with the starching operation.

Finally, the important factors to remember if good quality of work and long life of linen is desired, are *proper use of good supplies*—not always the most expensive—and good laundry help.

Cancer

(Concluded from page 33)

of its work. When war broke out in 1939 the institution was turned into an additional military hospital but with the beginning of the occupation in 1940 it resumed its normal role in French medical science.

The number of patients treated during the occupation years show the extent of its service:

Year	Patients
1939	44,211
1940	44,396
1941	54,202
1942	57,128
1943	60,790
1944	63,359

Patients were treated despite increasing difficulties of obtaining food supplies, maintaining hospital equipment and heating systems and restrictions on gas and electricity. *Work never slackened* in the research laboratories.

This article is based on material and statistics from "Bilans Hebdomadaires", a publication from a national statistical and documentary centre in Paris. Canadian statistics were supplied by the Dominion Bureau of Statistics, Ottawa. Pictures are of the Cancer Institute of Paris.



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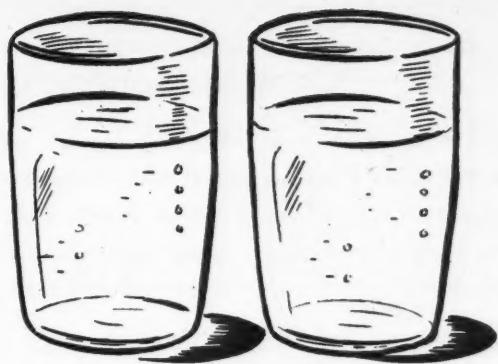
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APRIL, 1947



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Coming Conventions

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April 28-29—A.C.S. Sectional Meeting, Royal Alexandra Hotel, Winnipeg.

May 5-9—Third Fellows' Seminar, A.C.H.A., University of Washington, Seattle.

May 19-23—A.H.A. Institute on Hospital Pharmacy, Continental Hotel, Chicago.

May 29-June 3—Maritime Institute on Hospital Administration, Admiral Beatty Hotel, Saint John, N.B.

June 4-7—Maritime Hospital Association, Algonquin Hotel, St. Andrews, N.B.

June 23-27—Canadian Medical Association, Royal Alexandra Hotel, Winnipeg.

September 2-12—Chicago Institute for Hospital Administrators, University of Chicago.

September 8-12—A.C.S. Clinical Congress, Waldorf-Astoria Hotel, New York City.

September 21-22—A.C.H.A. Meeting, St. Louis, Mo.

September 22-25—American Hospital Association, Jefferson Hotel, St. Louis, Mo.

October 13-14—Saskatchewan Hospital Association, Saskatoon (tentative).

October 15—Manitoba Hospital Association, Royal Alexandra Hotel, Winnipeg.

October 16-18—Canadian Hospital Council, Royal Alexandra Hotel, Winnipeg.

Week of October 20—Alberta Institute on Administration, Edmonton.

October 25—Associated Hospitals of Alberta, Edmonton.

Week of October 27—British Columbia Hospitals Association, Victoria.

November 3-5—Ontario Hospital Association, Royal York Hotel, Toronto.

No dietitian should be above looking into her own garbage cans because from this she may learn the amount of waste, the kind of waste and the source of waste.—Muriel J. Westney, Dietitian, St. Joseph's Hospital, Toronto.

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APRIL, 1947

Laxative Action of Kellogg's ALL-BRAN

NOT MECHANICAL

recent research indicates

REASONS for the laxative properties of bran have long been debated. Some have held that the laxative effect of bran is due to mechanical action. Evidence now indicates that this action is biological, rather than mechanical.

Recent studies conducted by Reynier (1) now shed more light on the reason for bran's action.

Reynier succeeded in rearing axenic, or germ-free animals—animals lacking intestinal flora. They were born through Caesarian section, and continuously maintained in aseptic environment. From different types of feeding, research workers were able to make the following observations:

1. Animals in a non-axenic (natural) state usually obtain a definite laxative effect from bran.
2. Axenic (germ-free) animals become constipated when sterile bran is included in their diets.
3. When axenic animals are inoculated with certain multiple flora, bran then exerts its characteristic laxative effect.

The investigators concluded that the laxative effect of bran is not due to mechanical action on the intestinal mucosa, since it failed to act in axenic animals.

The investigators also concluded that the laxative effect of bran is due to a *biological* reaction in the intestinal tract, and that this effect is *imparted to the bran* by symbiotic intestinal flora which feed upon it.

As shown in earlier research, these beneficial microorganisms evidently produce gases occluded in the colonic content and thus help to fluff up the mass and prepare it for easy elimination.

Kellogg's, makers of Kellogg's ALL-BRAN, will be pleased to send you reprints of the articles from which this report has been summarized. Use coupon below.

(1) Reynier, J. A., *GERM-FREE LIFE APPLIED TO NUTRITION STUDIES*. Laboratory of Bacteriology, University of Notre Dame.

PLEASE SEND:

1. Germ-free Life Applied to Nutrition Studies
2. Mode of Action of ALL-BRAN in Laxation
3. ALL-BRAN and Intestinal Flora

Name

Address

(Mail to Kellogg Company, London, Ontario, Canada)

State Cancer Hospital

On the initiative of public spirited citizens of the state of Alabama, plans have been drawn for the erection of a \$2,000,000 cancer hospital and research centre at Birmingham, Ala. Conceived as part of the University of Alabama Medical Centre, this project gives Alabama a leading place among other states in the war against cancer. It will be a private, non-profit foundation and will be associated with all other research organizations in the effort to improve cancer therapy. Funds are to be raised from government grants, public contributions and private endowment.

New Chemical Helpful

BAL, a new chemical, has been made available to provincial health departments throughout Canada for the purpose of stimulating research in the treatment of poisoning from certain metallic compounds.

BAL, or British anti-lewisite, was developed during the war as an antidote to arsenical blister gases but has since been found effective in the treatment of arsenic poisoning. It is

also beneficial in the treatment of poisoning from mercury in humans, and zinc, antimony and, to some extent, chromates in experimental animals. It has been observed to be effective against complications arising in the treatment of syphilis.

The Autopsy

Let those who interdict the opening of bodies well understand their errors. When the cause of a disease is obscure, in opposing the dissection of a corpse which must soon become the food of worms, they do no good to the inanimate mass, and they cause a grave damage to the rest of mankind; for they prevent the physician from acquiring a knowledge which may afford the means of great relief, eventually, to individuals attacked by a similar disease. No less blame is applicable to those delicate physicians, who, from laziness or repugnance, love better to remain in the darkness of ignorance than to scrutinize, laboriously, the truth; not reflecting that by such conduct they render themselves culpable toward God, toward themselves and toward society at large.

—Theophilus Bonetus, 1620-1689

MATRON AND DIETITIAN WANTED

Applications will be received by Vernon Jubilee Hospital, Vernon, B.C., for the position of Matron; also for Dietitian. 70 beds, duties to commence approximately May 15th. Apply giving full particulars to K. W. Kinnard, President, Vernon Jubilee Hospital.

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to have charge of Department of Anaesthesiology, 135 bed Children's Hospital. In reply please state experience and degrees held. Salary to be arranged. Apply to: Superintendent, The Children's Hospital of Winnipeg, Winnipeg, Manitoba.

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This position has definite possibilities favourable to the applicant. For detailed information write or wire collect.

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for X-Ray Department of The Children's Hospital, Winnipeg. Apply to the Superintendent, stating age, experience, qualifications and salary expected.



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